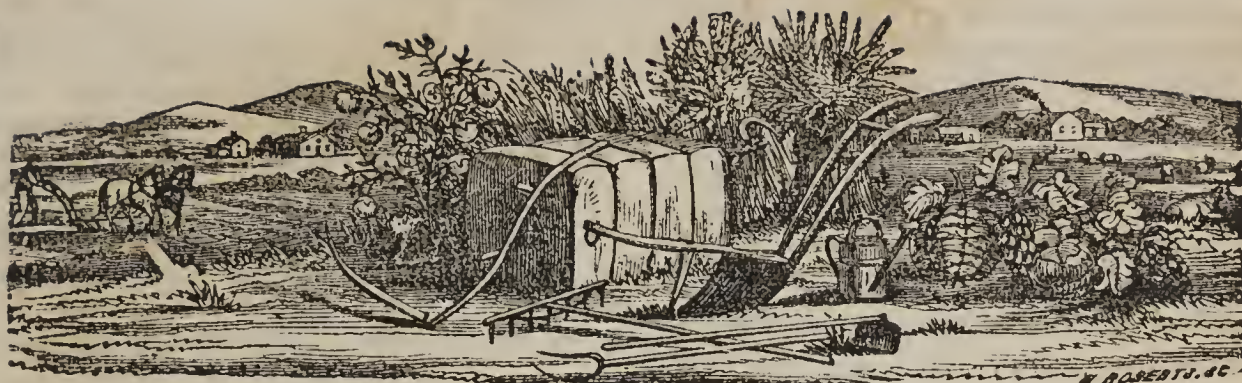


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THE FARMER AND PLANTER.

Devoted to Agriculture, Horticulture, Domestic and Rural Economy.

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The Farmer and Planter

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BY

GEORGE SEABORN,

Editor and Proprietor.

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For the Farmer and Planter.
Salmagundi.

MR. EDITOR:—The last number of the Farmer and Planter was received two days ago, and I have examined the Premium List for 1858, and will now offer to your readers the first chapter of my objections to it.

The time is past when premiums were offered with a view to restore the fertility of our fields, directly, by awarding them for the number of acres improved. We all know that fertility may be restored by an expense that cannot pay. We do not need to be informed what may be grown on any specific measure of land, regardless of cost. For, like the Indian's gun, the crop "may cost more than it comes to."—The particular knowledge needed, is, how to produce the largest crop with the least outlay

of capital and labor; in other words, how to get the largest profit for the agricultural labor and capital, either in crops or improvement in the fertility of our land, or both. If the cost of crop is more than it is worth, and the land not improved, it ought not to receive a premium, no matter how enormous it might be. If the deterioration of the productive power of the soil is equivalent to the value of the crop, the experiment is worthless, and should not receive a premium. The Premium List should be so arranged as to secure the largest amount of useful information to the men who follow the cultivation of the earth for a living. The fund which furnishes the means of paying for the premiums, is principally out of the treasury of the State, and therefore contributed by the citizens of the State, in proportion to their means, whether they are members of the Society or not; and we are, therefore, in honor bound so to manage as to give back an equivalent for what we receive. We should, in our arrangements, avoid, as much as possible, the *gambling principle*, and adopt, as much as possible, the *instructive principle*. The ambition of competitors should, as far as possible, be to deserve the premium, for that can be attained by many more than can obtain one.—The largest crop may depend on the season or other accidental circumstance, but the instructive character of the report or experiment, is matter of more certainty, at the same time that it is more valuable to the community, more honorable to the individual, and a more appropriate return to the State for her munificence. For these reasons I insist that the award of the premiums for field crops, should depend on the

instructive character of the reports presented, taken in connection with the amount of the crop—that the smaller crop, with the most instructive report, should be preferred to the larger crop and less instructive report.

If any member happens to have a rich bottom to make corn on, or a rich field to make wheat on, and the Society gives them the thirty dollar premium from now until dooms day, I cannot, for the life of me, understand how the agricultural interests of the State will be benefitted by knowing it. But if the experimenter presents a new variety, better, by being a surer crop, or yielding better than those in common use; or he plants and cultivates and manures in such way as to make more with the same labor and expense; or if he has adopted a system of rotation that improves the land and makes an equal crop, &c., &c., &c., I can understand how the premium is deserving, and how the State is to be benefitted to the amount of the cost of the premium.

My own impression is, that one of the greatest wants of our agriculture is, to *know what the crop costs*. I mean the *price of production* and the *deterioration or increase of the fertility* of the soil included. Both these considerations are indispensable to the adoption of any intelligible and rational system of general amelioration in our practice. I know that both branches of this calculation require *labor, care, study and ability*. I am aware, also, that exact precision is not attainable, but approximate truth may be had, and the *importance* of the investigation demands the attempt at our hands.

Experiments on one acre can be made as instructive as on twenty or fifty. And as we cannot expect by our premiums to pay men to make the State rich, I perceive no good reason for offering premiums for the production of twenty or fifty acres. If premiums were confined to the production of one acre, the number of competitors would be, most likely, greatly increased. And our experience teaches that the reports for one acre have been, to say the least, as instructive as on fifty, and the ten dollar premiums been worth as much to the State as the thirty dollar premiums. For all useful purposes we might as well have offered three ten dollar premiums, either of which would have been just as valuable as the one that cost thirty. The ten dollar premiums, or rather the one acre premiums, do not exclude the fifty acre competitor, but the fifty acres are within the reach only of the wealthy, and, therefore, being to that class an exclusive privilege, that

is, on account of that exclusiveness, objectionable. I insist that our Premium List should be so arranged as to give every member a fair and equal chance at the honors of the Society; at the same time that they are secured, as far as possible, only to those who have, by their study, industry, enterprise and intelligence, deserved them.

In all cases it is necessary to have the previous history of the piece of ground on which the premium grew, and a description of it also. What is its geological formation? Is it level or rolling? Sandy or clayey? Is its exposure North, South, East, West, or what? What grew on it last year and the previous two years? What was the character of the season, and the amount of the crop each year? How was it plowed, how deep, how manured, &c., &c.? The answers to all these questions are necessary to determine the practical value of any system of management that has produced a premium crop. The variety planted, the manner of preparation and cultivation, are also necessary to be known. These questions can all be answered much more truthfully and with less trouble, if the field crop premiums were confined to the one acre quantity of land. The competitors could then, from year to year, experiment on the same spot, and the experiments be with facility systematized.

If the eighty dollars worth of premiums offered for the production of short staple cotton, had been in eight premiums instead of four, coupled with the proper questions to be answered in the reports, we should all have stood on equal footing, and the chances for improvement been just twice as great as they are now. The same rule would apply to corn and wheat. The premiums had just as well been all of the same size. For the distinctions of 1st., 2nd., 3rd., and so on, would have been all sufficient as distinctions in the grades of honor received by the competitors.

As I shall have more to say when circumstances permit, of the Premium List for 1858, I now advertise all that may be disposed to volunteer defence of the Executive Committee, that they may save themselves all trouble on that score. I am discussing and shall continue to discuss the Premium List. I am disposed to hold no body responsible for it, and if I was, it would be the State Society, for it is, in reality, the act of that Society. My object is not to find fault, but to offer considerations to your readers, why I think our policy needs, or would be more efficient by being modified in some respects.

RIGMAROLE.

Potts Cove, April 7th., 1858.

For the Farmer and Planter.

Book Farming.

We are fully aware, Mr. Editor, that book farming is held in great contempt by a portion of our agricultural brethren, and we are inclined to the opinion, as *things have been*, that this contempt is well merited, because most of our agricultural writers publish through our agricultural journals, articles founded upon, or resulting from scientific investigations, and not upon actual and fair experiment. An agriculturist conceiving an idea new to him, is very apt to put it upon paper and send it to an agricultural journal for publication, without having tried it—or perhaps he sends it after trial and success, but does not state the particulars of his trial. The readers of the journal in which it is published, try it, and fail—hence, they conclude book farming, is all humbug—but not so. If the agriculturist above referred to, had conducted his experiment fairly and correctly, the result would have been differently. Let us illustrate this: An enterprising agriculturist conceives an idea and institutes an experiment. He succeeds the first year; he continues his experiment with success the second year.—The third year is a failure with him, and all others that followed him. He is laughed at, and pronounced a humbug; when perhaps if he had continued his experiment carefully—ascertaining the character of his soil—had kept a memorandum of how and when he prepared it for the seed, when and how he planted, and when and how each working was conducted. In addition to this, he should have had a memorandum of the state of the thermometer, three times each day. Besides this, he should have had a rain gauge on the spot, to ascertain how much water fell on his land—at what times, and in what quantity. And still more, he should have had a hydrometer to ascertain and note, three times a day, how much moisture the atmosphere contained. If he had noted all these facts, and compared and digested them, he might have been able to ascertain the *true* cause of his success and his failures; and if he had stated them to others, they might have known whether to attempt to follow him, and to what to ascribe their failure and success.—This is the only way to conduct agricultural experiments, to make them really valuable.

If any one smitten with book farming, believing in what ever he sees in print, should try to imitate it, the chances are five to one, that he will fail. And thus books and journals of agriculture fall into just contempt.

But if agriculturists would try experiments fairly—keep all the records we have suggested, and report faithfully, all the particulars—not only of success, *but of failure*; you will see at once that agricultural books and journals would become invaluable, as records of the ideas and experiments of others, and spread more light abroad in one year, than would be shed in twenty centuries of isolated and imperfect experiment, such as characterize agriculture from the time of the Greeks and Romans.

SPARROWGRASS.

Little Branch, April 6th, 1858.

REMARKS—Our friend "Sparrowgrass" need not give himself any trouble about our "trouble" in editing his communications, to which he alludes in his private note. Let him write for the Farmer and Planter without the fear of troubling us. Let us hear from him at all times, when he feels in the humor to write; and especially how the "Old House Field" is progressing in the way of improvement.—ED. F. & P.

For the Farmer and Planter.

Signs of the Weather.

MR. EDITOR:—Every people have, and almost every individual has some sign by which to judge of the "*weather*" and its probable changes in advance. A reliable prognostic of the weather is of more value to the mariner, perhaps, than to any other class; and to the farmer, I think, next.

The wind, as an element of the "*weather*," has undoubtedly laws to which it conforms with more or less uniformity. Lieutenant Maury has laid the maritime world under lasting obligation to him by discovering and mapping out certain of these laws that govern the winds on the ocean. May we not hope that some inductive mind will rise, who will lay hold on the facts already known, and collecting others, reduce them to something like rule or system; thereby gaining our lasting gratitude by enabling us to understand as much of winds on land, as is known of them on the sea.

The object of this communication is, to call your attention to the fact, that, here in Abbeville District, at least, the wind will shift, nine times out of ten, to the right; or, to speak more plainly, if you stand with the wind blowing in your face from the South, it will blow next from the S.W. or W.; next from the N.W., N. or N.E.; and so on around the point of the compass. Of course it does not always proceed with the same regularity, nor does it sometimes proceed at all, for it may stand and blow a week from one point, but when it does shift, it will be in the direction I have mentioned.

Again, all have noticed that there are certain points that the wind blows from much more than from others; for instance, it shows, I think, a preference something in the following order: S.W., S., W., N.E., S.E., N.W.—wind directly from the N. or E. being very rare. In making its circles it will pass sometimes in a few minutes, half round the horizon, but generally it proceeds more slowly around the different points of the compass, passing some hastily, and hanging at others.

The above I have noticed for several years, and I will only give one corollary that I think is fairly deducible from it, and which has been of service to me, viz.: Never kill hogs with the wind in the N. E., as is often done; for the next shift will be to the South, consequently warm; but kill with the wind in the West, and you may count on cold weather for some days, as a general rule.

W. L. A.

REMARKS.—We believe our correspondent is correct in his views of the shifting of the wind. We have observed it for now many years, since hearing an old man state that he had never known a North wind to shift to the N. W. or West directly to the left, but always to the right, by the way of the East, South, &c.—Ed. F. & P.

For the Farmer and Planter.

A Defence.

MR. EDITOR:—"A multitude of scribblers daily pester the world with their insufferable stuff."

With a venture of being classed among the above, we must beg of you a small space and a little patience—premising in the outset to expect a reply from no one—not even from "One of the Clerks in the Office," since we know that he, like ourself, is heartily tired of this hackneyed subject—the late State Fair.

"One of the Clerks" decapitates in regular succession, all the "fault-finders," and second on his list, "does up" your humble correspondent.

Now, we thought that Mr. Stokes' beautiful specimens of book-binding should have been prominent as premium-deserving articles; and that it should not have been necessary for a special call upon the Secretary, to secure Mr. Stokes a premium.

We thought too, that the "goat skin vest," that "fancy miscellaneous," did not deserve a two dollar and a half premium, because the vest was not worth a premium; and if a tailor had made it, it would not have been awarded one; but the ladies—bless them, we would give

each of them a premium if we could, because we love the sex generally, whether they raise goats or children, make vests or ———.

We thought, too, those axes ought to have received a premium, but we heard the owner say he never got one.

We thought, too, those turnips were beautiful, &c.; and those "carrots and parsnips"—were they not awarded under the head of vegetables? Certainly they were.

The plowing match, too; we can't retract a thing we have said about it, because all we said was true. We will only ask, who took the premium for "the best one horse turning plow?" Was his plow "over the fence?" Was it tested? Certainly not. It was all the week of the Fair way up yonder by the gate. What made it the best rooter stock turning plow exhibited at the Fair?

We hope the authoritative "Clerk" and the "rest of the Committee" are still surviving, and may live long to do many noble acts for our agricultural wants.

Now, Mr. Editor, "One of the Clerks" made "game" of our article—dissected it—turned it over and riddled it again; but, like Galeo, "we cared for none of these things;" we only feel chagrined because he called us a bachelor. We would sooner be called a drone, a bandit, a marauder—yes, *anything* in preference to a *ba-che-lor*. O, if "One of the Clerks" could only see us as we came in at nightfall from our daily labors, he would never have thought we were a bachelor. A sweet wife and two little pets are arrows in our quiver not to be shot from a bachelor's bow.

One word more, Mr. Editor, and we have done. "Chinquepin Ridge" has doffed his *nome de plume*, and reveals himself as the venerable Dr. Barratt. When we wrote our article, we had no idea who "Chinquepin Ridge" was, or we would not have rubbed him so severely. However, our article was only the expression of thoughts we still entertain. The Doctor's "Climatology" article may be scientifically true; it most certainly is truly scientific, and being no man of science, we don't pretend to understand it. Until we have more age, more experience in planting, become more scientific, and know more of "climatology," we cannot presume to sign ourself other than your very humble servant and friend,

PERKINS, JR.

Poverty Place, March 31st, 1858.

Cabbages, like corn, "grow by hoeing and not without."

For the Farmer and Planter.
The Advantages of Deep Plowing.

MAJ. SEABORN—*My Dear Sir:*—As I have the science of agriculture and your individual prosperity at heart, I cannot more profitably, I suppose, employ your time and patience, or illustrate the decided advantages of deep plowing, better, than give you the result of a beautiful experiment of the Hon. N. W. Woodfin, of North Carolina. Mr. Woodfin is a profound lawyer and a judicious husbandman of the "Old North State." I proceed forthwith to give you his admirable suggestions, hoping they may materially aid you. In a letter to myself, the Hon. gentleman says: "I raised in 1855, on 7½ acres of land, 855 bushels of corn, and on 20 acres, including this 1800 bushels, or 90 bushels to the acre, being the best parts of a large field, not planted with a view of measuring. The best grew on upland—a stiff, red clay, near the base of the hill, and extending into a reclaimed maple swamp, which had been 10 years in timothy, without manure.—The ridge land had been worn out before I purchased it, in 1838. It had been manured and cropped in corn, wheat, oats and clover, on a five years shift; had, however, been for four years in clover, and generally fed off to stock. I had enclosed several acres of it to fatten my hogs; in two years about 80 were put on it, and the corn cut and hauled in while green, and leaves scattered over the ground abundantly, so as to be rooted in by the stock. It had been in corn the last year, '54—after being subsoiled from 11 to 12 inches, was top-dressed in February, '55, with barn yard manure—I suppose not more than 30 two-horse loads per acre, and turned in pretty deeply. The low-ground was well drained, and had been in corn the year previous, '54, also. It was subsoiled to about the same depth, with a little manure. On the best of it none was put—a portion was exhausted, sandy land, on the river's edge. That was well top-dressed with swamp muck, and about thirty loads of barn yard manure, and plowed shallow. The ground was well stirred before planting, a single furrow run on a level surface, and the corn dropped in it and covered with a plow. I drill, certainly. Placed these rows three feet apart, except on the sandy land, where they were 3½, planted one grain of medium size, at the distance of about 8 inches in the strongest soil, and ranging it from that to 12 inches, according to the strength of the land. Soon after the corn is up, the plow is run near it, throwing the earth from the

corn, and replanting. It is then cultivated in the usual way, plowing, however, as shallow as possible, and at farthest, once in two weeks. This was worked about every 12 days, putting a little earth to the corn. I should have said that the roller was passed over the sandy part at planting. The largest corn is not the best for us, it requires too much distance."

I have, Mr. Editor, been thus particular, in order that the farmers and planters—the men who feed and clothe mankind—may know the benefits, marked as they are, of disintegrating the soil.

The subsoil plow is the grand *eureka* of the planter. It is that which is revolutionizing this country and making fresh and vigorous our apparently worn out soils. Wonderous changes has it already wrought. It is to planting, what machinery is to manufacturing. The great renovator and beautifier of all kinds and every variety of soils. I consider it the very key to unlock the hidden treasures of our earth. My brother agriculturists, use this key—plow deeply.

With the very best wishes for you, dear Major, socially, pecuniarily, and above all, religiously, I must, with all honesty and sincerity, subscribe myself,

Truly yours, W. S. DOGAN.
Sylvania, March 23d., 1858.

Cholic and Scratches.

A subscriber and a M. D., in making his remittances for 1858, gives us the recipes which will be found below:

I send you a couple of recipes, which I have found extremely useful in the treatment of that most excellent animal, the horse. They may be of service to some of your readers.

FOR CHOLIC.—Tinct. asafœtida, 4 oz.; laudanum, 1 oz.; water, 1 pt. Drench, and repeat in one hour if not relieved. (The tinct. of asafœtida is prepared by digesting 2 ozs. of the gum in a pt. of good whiskey, 10 days.)

The other is a remedy for scratches, which, if used in the early stage, will not fail. Into melted lard stir as much soot as possible, wash the affected part well; and anoint twice a day. Unlike the other remedies for this malady, it is a soothing one.

I remain yours, truly, C. W. H.
Maybenton, April 2nd, 1858.

A VERY STRONG WATER-PROOF GLUE.—Take common glue and after preparing it in the usual manner for using, add gradually about one-eighth in quantity of boiled linseed oil, stirring it until it becomes thoroughly mixed.

We find the following extract from the report of the President of the Blue Ridge Rail Road, in the "Railroad Record," and for information to such of our readers as may not have seen the President's report, we transfer it to our columns. It will, no doubt, interest many who will not discover in it that great and impracticable Maelstrom that is to swallow up all the resources of the State, that many of our wise legislators would make the people believe.

We have intended visiting the Tunnel, in order to examine and give our readers some account of the progress of the work up to date, which, we are informed, is quite encouraging of its early completion; but we have not found it convenient to do so—hope in our next number, however, to be able to "report progress."—Ed. F. & P.

Blue Ridge Rail Road in South Carolina.

The annual meeting of the stockholders of this road was held in Charleston, on Nov. 17, and the following gentlemen elected directors for the ensuing year:

Hon. Edward Frost, Hon. Charles Macbeth, Mayor of Charleston, Henry Gourdin, C. M. Furman, G. A. Trenholm, Robert Adger, William C. Dukes, Chas. T. Lowndes, Wm. C. Heyward.

Hon. Edward Frost was subsequently elected President, and Wm. H. Peronneau, Secretary and Treasurer.

The report of the President contains an elaborate expose of the condition, prospects, and resources of the company. We make such extracts as will show the condition of the work and the finances of the road:

For the purpose of exhibiting the work which has been done, and the present condition of the Road, it will be convenient to divide it into sections.

FROM ANDERSON TO PENDLETON.

Beginning at the junction of the Greenville and Columbia Railroad, near Anderson, the Blue Ridge Road passes by a deep cut through the town, and proceeds across a hilly country, thirteen miles to Pendleton, crossing the valley of Twenty-Six Mile Creek over a bridge three hundred feet long and one hundred and ten feet high, and the valley of Twenty-Three Mile Creek over a bridge one hundred and fifty feet long, and sixty-one feet high.

The grading is finished, and a part of the Anderson Depot ground, sufficient for the present, filled and leveled. The road is completed for five miles; the cross-ties to Pendleton contracted for and delivered on the line a great part of the way; and the rails, chairs and spikes, for the section, are imported. Nine hundred tons are on the line of the road, and six hundred are at the South Carolina Railroad Depot, under bond for the duties, because specie could not be procured to pay them, except at a large premium. One first class locomotive, ten gravel, and ten platform cars have been purchased and are employed on the road, conveying material, widening the cut at Anderson, and filling up the depot grounds. The masonry for the bridge over Twenty-Three Mile Creek is finished.

The timber for the bridge is procured, and the workmen are framing it. The trestle over Twenty-Six Mile Creek will be finished by the first of December; and early in the next year the trains will be running from Anderson to Pendleton. (They are now running.—Ed.)

The building of the masonry at Twenty-Six Mile Creek was delayed, because a deep and heavy cut, this side of it, was not finished until September. No suitable rock is found near the creek. The contractor was engaged for some time quarrying rock at Honeapath, on the G. & C. R. R., 17 miles below Anderson. His hands are now employed at the quarry of Col. W. Alston Hayne, near Pendleton. As soon as the road is finished to the town, by a temporary track of $1\frac{1}{2}$ miles from the road to the quarry, the rock will be carried directly from the quarry to the site of the bridge, and that from Honeapath will be carried over the G. & C. R. R. and our road. When the masonry is done, a bridge will supply the place of the trestle.

FROM PENDLETON TO CANE CREEK.

Proceeding from Pendleton, the road passes through a country similar to that from Anderson; crosses Eighteen Mile Creek, over a bridge two hundred and fifty feet long, and fifty-one feet high, and Seneca river, over a bridge six hundred feet long, and sixty feet high. From this point it is continued, with lighter grading, to Cane Creek, a distance of about twenty-one miles from Pendleton, and one mile beyond the town of Walhalla.

The grading on this section is nearly finished, except at intervals, not exceeding in all three or four miles, where the grading is light, and can be finished before the embankment and bridge across Seneca river. The masonry at Eighteen Mile Creek has been delayed until the road is finished to Pendleton, that rock may be carried from Hayne's quarry. The bridge over Seneca river will require three piers thirty-five feet high, to span the river and a part of the bottom, sufficient to give vent to the water in high freshets. Two piers are finished, or nearly so. The contractor is at work on the foundation of the eastern abutment, with a large quantity of rock on the ground, ready to be put in place. A long and high embankment over the bottom is necessary to connect the bridge with the eastern bank of the river. This has been made to a height above freshets. The citizens of Walhalla, in May, purchased and generously conveyed to the Company twenty acres of land near the town, for a Depot.

FROM CANE CREEK TO CHAUGA CREEK.

Crossing Cane Creek, the road commences the ascent of the Blue Ridge. To Frick's Meeting House, a distance of two and a half miles, the rise is gradual. A short distance beyond that point the Road reaches the base of the Turnip Top, the most eastern range of Blue Ridge, and for four or five miles gradually ascends along its eastern slope; crossing by a bold curve around one of the knobs to its western slope, it continues up the western slope until it encounters the "Saddle" moun-

tain, which projects from the Turnip Top across the line. Passing through this obstruction by a tunnel four hundred and seventy-five feet long, the road crosses over to the eastern slope of the Stump House mountain, along which it ascends, passing through a spur of the mountain by a tunnel called the "Middle," (four hundred and twenty-five feet long,) until it reaches the portal of the Stump House tunnel, two hundred and thirty-six feet below the highest point of the mountain, and as high as the grade, restricted not to exceed sixty feet to the mile, can ascend. The western slope of the Stump House mountain is reached by a tunnel 5,800 feet long, which emerges on the valley of the Chauga, about ten miles distant from Cane Creek. The ascent of these mountains is effected by heavy cuts along the side, and through lateral ridges of the mountains, and by high embankments across the deep gorges which separate them.

A large portion of the mountain grading has been done.

THE SADDLE TUNNEL.

Before noticing the works on the tunnels, it is necessary to premise that the perforation of a mountain by a tunnel, generally, is not begun until the grading of a slope, by an open cut, exceeds the cost of tunnelling. The open cut is called the approach of the tunnel. The Eastern approach of the Saddle Tunnel was finished, when a land slide into the cut delayed work in the tunnel until the earth can be taken away. The Western approach contains a large portion of rock, and is well advanced. It is not yet determined how much further the open cut shall be continued.

MIDDLE TUNNEL.

Both the Eastern and Western approaches are nearly completed. The contractor has not been urged forward on these tunnels, because they can be finished certainly before the Stump House tunnel, and there is no advantage in finishing them sooner.

THE STUMP HOUSE TUNNEL.

Four shafts are provided to expedite the work on the Stump House tunnel, and for its ventilation when completed. Its completion depends very much on the time when they shall be sunk to the grade of the road; for each shaft at grade, presents two faces in the tunnel which can be worked. When the four shafts are finished, the excavation will be carried on from eight points in the tunnel, in addition to the work in the eastern and western entrances. The contract was let to Mr. George Collyer, in May, 1856. The necessary preparations for the work, and the procuring of workmen, required some time, so that the first return of work was made the first of October, 1856. Shaft No. 1, 161 feet deep, was sunk to grade the first of February last, and shaft No. 4, 188 feet deep, was finished in September. To carry the other two shafts to grade, fifty-six feet remain to be excavated in shaft No. 2, which is 228 feet deep; and 136 feet remain to be sunk in shaft No. 3, which is 213 feet deep. The work on this last was retarded in consequence of the

detention at Philadelphia, by the ice last winter, of the steam engine intended to work it, so that the engine was not put up until the spring of this year. Three steam engine and the horse "Gin," with all the necessary machinery and fixtures for working the shafts and tunnel, are now in use, besides two small engines to drive the wind fans for ventilating the shafts and tunnel. More than two hundred workmen are assembled at Tunnel Hill, who work, by relays, night and day. 479 linear feet are excavated from the eastern portal, to the full section of the tunnel, and 212 feet of the heading from the western portal. The heading worked from Shaft No. 1, is excavated 275 feet, and in the heading worked from Shaft No. 4, 30 feet, making in all 996 feet. About one hundred feet of excavation will connect the work from the eastern entrance with the work in Shaft No. 1, and when that is effected, 825 continuous feet of tunnel will be opened from the eastern portal. If a full force can be obtained and employed, the Stump House Tunnel may be finished in three years. But it might be safe not to expect its completion in less than four years.

Mr. Collyer having become dissatisfied, and desirous to relinquish the contract, has been accordingly released. He complained that he was losing money, and under such circumstances it was vain to expect that he would prosecute the work vigorously. The construction will be continued by Messrs. Humbird and Hunter, with an increase of the prices paid to Collyer. For the character and qualifications of these gentlemen, who are well known to the Chief Engineer, reference is made to his Report. They will begin to work with the advantage of every necessary preparation, of engines, machinery, and workmen, and it may be expected that their progress will be satisfactory.

CHAUGA TO CHATUGA RIVER.

This section, about 7 miles in length, ends on the southern bank of the Chatuga river, which is the boundary between South Carolina and Georgia. The Road, crossing the Chatuga by a short bridge, reaches the Village Fork by a deep cut through the dividing ridge, and ascending along the slopes of that stream, crosses through the dividing ridge to Whetstone Creek and ascends up the valley of that stream (crossing it twice by short bridges) until it reaches the southern bank of Chatuga river. Through this section the country is very broken, but presents no engineering difficulties.

Less work has been done on this section than upon either of the others. A few contracts were let by Bangs & Co., and those contractors have been permitted to work at their convenience. As soon as the progress of the tunnel shall require it, this section will be put under contract.

	Total	Amount	Amount
	Grading	Grading	Grading
	at begin	done	remaining
	ning.		to be done
	Cubic	Cubic	Cubic
	Yards.	Yards.	Yards.
From Anderson to Pendleton.....	845,213	805,113	40,100

From Pendleton to Cane Creek.....	995,473	721,854	273,619
From Cane Creek to Chauga Creek....	1,369,219	942,721	426,498
From Chauga Creek to Chauga River.....	519,810	186,965	332,845
In South Carolina,....	3,729,715	2,656,653	1,073,062

CHATUGA TO THE LOCUST STAKE.

Crossing the Chatuga by a bridge 490 feet long, and 110 feet high, the Road is continued through Rabun County, Ga., to the Locust Stake, in the boundary line between Georgia and North Carolina. From Chatuga the Road pursues the valley of Dick's Creek to the dividing ridge, through which it passes, by a tunnel 2,300 feet long, into the valley of the Warwoman; ascending the valley of the Warwoman until it reaches the dividing ridge, it passes through the ridge into the valley of the Sticoa by a tunnel 1,700 feet long; it then follows the Sticoa valley to the Rabun Gap, where the waters flowing into the Tennessee river, divide from the waters flowing into the Savannah. Here the mountain section of the road terminates, and the Blue Ridge is passed. The remainder of the line in Georgia proceeds with very light grading down the valley of the Tennessee until it reaches the Locust Stake.

Besides the crossing of the Chatuga, two bridges of 60 and 100 feet each required over the Warwoman. One abutment for the latter is finished to the height of the bridge seat, and the other abutment is raised above high water. The Chatuga is crossed at a site most favorable for a bridge. The rocky banks, through which the river has worn its channel, presents two bold prominences on the verge of the stream. The abutments will be set back in them, so as to require only a small quantity of masonry, and the bed of the river affords a safe, rocky foundation for the two piers. A little more than one-third of the grading on this section has been finished.

DICK'S CREEK TUNNEL.

The approaches of the Dick's Creek Tunnel, which are long and deep rock cuts, are not yet completed. The work on this tunnel has been delayed by the first contractor having, after the expiration of the time stipulated to begin operations, declined the work. The second contractor abandoned the work. It is now progressing satisfactorily under the present contractor. The tunnel has to be worked chiefly from the two ends, which will cause its construction to be slow. It will probably take as long a time as the Stump House Tunnel.

WARWOMAN TUNNEL.

The western approach, though a long and deep earth cut, is not finished. Three hundred feet were excavated on the 1st of September, in the eastern end, and the contractors are vigorously at work.

The total grading of the road, in Georgia, at the beginning,....	1,378,000	cubic feet.
Done.....	403,000	" "
Remaining to be done.....	975,000	" "

FROM THE LOCUST STAKE TO KNOXVILLE.

Through the State of North Carolina the

road descends along the valley of the Tennessee river, and, entering the State of Tennessee, continues along the valley as far as the confluence of the river with Citico Creek, about thirty-two miles from Knoxville, at which point the road leaves the Tennessee river, deflecting westwardly to that city.

No work has yet been done in North Carolina.

One mile through the suburbs of Knoxville, extending from the junction with the East Tennessee and Georgia Railroad to the Holston river, is finished. Sixteen miles are under contract from the Holston, opposite Knoxville, to Maryville, the County town of Blount County. The Holston at Knoxville is crossed by a bridge 1,150 feet long, and 66 feet high, and the road proceeds to Maryville, over an undulating and fertile country, crossing Little river by a bridge 250 feet long and 35 feet high.

One-third of the grading on the line from the East Tennessee and Georgia Railroad to Maryville is done. Of the seven piers in the Holston river, one is finished, the foundations of another are above water, and the contractor is now at work on a third.

Very good rock is found on the bank of the river, and when the foundations are laid, no difficulty attends the completion of the bridge. The work is undertaken by an experienced and respectable contractor.

Total grading of the sixteen miles	
let, in Tennessee.....	310,000 cubic yards.
Done.....	148,000 " "

Remaining to be done..... 162,000 " "

The right of way through Knoxville and Knox County, with the exception of two cases under appeal, has been purchased; many claims for compensation for the land taken by the Company in Blount County have been released, and a few adjusted with the owners. With very few exceptions the rights of way through South Carolina, Georgia and North Carolina, have been released or purchased.

The total amount of expenditures, on all accounts, since the beginning of the work under Bangs & Co., has been\$1,578,713 97

A part of these expenditures is payable in mortgage bonds of the Company to the amount of.....	\$181,036 49
In Knox County bonds....	17,744 39
In Stock.....	176,922 59—375,703 47

\$1,203,010 50

Cash reserved on contracts not finished, 25,725 04

Total of cash expenditures.....\$1,177,285 46

More than the amount of Knox County bonds, stated above, have been paid out on account of the work in Tennessee, but the payments do not appear on our books, and a statement has not been received from the President of the Tennessee Company.

Twenty-nine thousand dollars of the mortgage bonds issued to Bangs & Co., are held by the Company as security for a loan of \$28,500, made to them under their contract.

The amount expended, compared with the amount of work done, and the large incidental

expenses defrayed for surveys, right of way, depot grounds, and other items of that class, affords encouragement to expect that the cost of the road will not exceed the estimates which have been made.

The Blue Ridge Road to Knoxville will connect with the Northern terminus of the Georgia and East Tennessee Railroad, and with the Southern terminus of the Tennessee and Virginia Railroad, and crossing the direction of those roads, will form a Western connection with the Knoxville and Kentucky Railroad, designed to connect the latter city with Danville, in Kentucky, from which a railroad is completed in Covington, opposite to Cincinnati, on the Ohio. From Knoxville it will be 103 miles nearer to Charleston than to Savannah, and 46 miles nearer than to Richmond, so that the Virginia and Georgia roads, which now transport the trade of East Tennessee from Charleston, must become tributaries to the Blue Ridge Road, while the trade along the extent of the Knoxville and Kentucky Road will naturally continue along the shortest line to the Atlantic at Charleston. By the completion of the Chattanooga and Cleveland Road, and by a projected branch of the Blue Ridge Road from Citico Creek to Athens on the Georgia and East Tennessee Railroad. Chattanooga will be brought within twenty-three miles as near to Charleston as it is to Savannah over the Georgia Railroads. This Southwestern branch of the Blue Ridge Road may compete with the Georgia roads for the trade of Chattanooga, while the main road to Knoxville, having the advantage over Savannah of 103 miles in distance from Knoxville must engross the trade from that city and the country dependent upon it.

It is a misapprehension to suppose that the Blue Ridge Railroad is important only as tributary to the commerce of Charleston. The distance between the western limits of South Carolina and Tennessee, across North Carolina and Georgia, by the Blue Ridge Road, is only eighty-nine miles. Anderson is 195 miles from Knoxville, Greenville is 231, Abbeville is 240 miles, Newberry 275 miles, Columbia 322 miles, Winnsboro' 361 miles, Camden 384 miles, while Charleston is 410 miles over the projected junction of the Greenville and Columbia Railroad with the South Carolina Railroad, between New Market and Aiken, and is 453 miles from Knoxville by the way of Columbia. South Carolina imports corn, wheat, flour, bacon, lard, tobacco, whiskey, salt, lime, horses, mules and cattle. East Tennessee, Kentucky and Southwestern Virginia produce these articles in excess of the domestic consumption. While corn is selling at one dollar a bushel in the country west of Columbia, it can be bought in Tennessee for twenty cents. A large portion of bacon, lard and whiskey which is consumed in this State, is brought from Cincinnati by way of Baltimore and Charleston. Hogsheads of bacon and hams, marked "Cincinnati," may be seen in the Depots of the Greenville and Columbia Railroad as far as Anderson. This bacon is carried 383 miles from Cincinnati to Wheeling by the Ohio river, when it is navigable, and 245 miles by railroad when

it is not. From Wheeling it is carried to Baltimore 380 miles over the Baltimore and Ohio Railroad, by sea 650 miles from Baltimore to Charleston, from Charleston 257 miles to Anderson, nine hundred miles by water, and seven hundred and fifty-two miles by railroad, being 1,670 miles in all. Or, if the Ohio is not navigable from low water, or being frozen, the carriage from Cincinnati to Anderson is 882 miles by railroad and 650 miles by water, being 1,532 miles. If the bacon is carried to Anderson by the way of New Orleans and Charleston, the distance from Cincinnati to Charleston is more than 2,000 miles by river and sea, and 257 by railroad from Charleston to Anderson. If it be carried from Nashville, the distance is 730 miles by railroad and more than 600 miles by the Ohio and Cumberland Rivers. If from Chattanooga, this distance is 575 miles by railroad and about 700 miles by the Ohio and Tennessee Rivers. By no other route can Western produce be brought into South Carolina. By the Blue Ridge Railroad, the carriage of bacon, lard, whiskey, flour and tobacco from Knoxville to Anderson will be only 196 miles. The distance from Knoxville to all the other Western Districts of the State may be calculated from Anderson. These districts will be most benefitted by the Blue Ridge Railroad.— But by a calculation of distances by the three routes mentioned, compared with the distance of many other districts by the Blue Ridge Road, it will appear that a large part of the State should be as much interested as Charleston in the Blue Ridge Road.

Wheat is carried from Knoxville to Richmond, 453 miles, and then manufactured into flour. But the largest portion is carried 300 miles further by James River and Chesapeake Bay, to Baltimore, and there manufactured.— Why might not the water power along the Greenville and Columbia Railroad, and especially at Columbia, be employed in successful competition with those cities, the cost of carriage being so much in favor of South Carolina, Columbia might, profitably, and should manufacture flour as largely as either of those cities. It has much greater water power than Richmond, and a similar locality in an elevated country, and a healthy climate, with an easy railroad carriage to market.

Cincinnati has become an immense depot of provisions, because it has a shorter railroad connection with the Atlantic than other western cities; and Baltimore, the nearest place of export for them, engrosses a large share of that trade. Knoxville must also become the depot of a great trade in western productions, and Charleston occupy, in reference to it, the position of Baltimore to Cincinnati.

Statement of the affairs of the Blue Ridge Railroad Company in South Carolina, on the 1st Nov., 1857.

EXPENDITURES.	
For construction.....	\$1,158,987 70
Iron	87,914 67
Engineering	133,544 41
Expense, salaries, printing, legal advice, expense of suit ads. Bangs & Co., &c.,.....	45,400 10
Real estate.....	7,718 51

Right of way, South Carolina.....	\$1,045 00
Right of way, Georgia.....	3,775 00
Do do N. Carolina.....	1,630 00
Do do Tennessee.....	5,340 00
	<hr/>
	14,790 00
Interest on Mortgage Bonds.....	22,211 79
Loss on sales of Bonds and Stocks after deducting interest received from same.....	17,651 80
Road Bridges.....	812 41
Platform and Dirt Cars, and expense of Locomotive.....	4,881 00
Advances to sundry contractors.....	37,784 05
Sundry open accounts.....	15,995 20
Due by Anson Bagg & Co.....	2,082 30
	<hr/>
	110,412 79
	<hr/>
	\$1,660,186 76

RECEIPTS.

From Capital Stock—Installments paid in.....	\$1,133,116 30
Bills payable—Notes discounted, secured by pledge of State six per cent. bonds.....	20,000 00
Pendleton Railroad Company.....	57,020 69
Blue Ridge Railroad Co. Bonds payable—For real Estate.....	110 00
	<hr/>
	3,000 00
Interest due Anson Bagg & Co.....	633 96
Interest in suspense.....	1,025 78
Sundry open accounts.....	4,642 36
Due to contractors.....	10,209 16
Bonds of Knox Co. paid to contractors.....	5,844 86
Mortgage Bonds, issued to contractors.....	181,000 00
Stock—Full shares issued to contractors.....	88,200 00
Mortgage Bonds, due to contractors.....	15,215 98
Stock—Full shares, due to contractors.....	17,164 33
Bonds of Knox County, due to contractors.....	4,527 36
Amounts reserved as security for completion of contracts, viz:	
In Cash.....	\$25,725 04
In Mortgage Bonds.....	13,820 51
In Bonds of Knox Co'sy.....	7,372 17
In Stock—Full shares.....	71,558 26
	<hr/>
	118,475 98

\$1,660,186 76

E. E. WM. H. PERONNEAU, Treasurer.
Charleston, November 1st, 1857.

Subscriptions to the Capital Stock of the Blue Ridge Railroad Company in South Carolina.

By State of So. Carolina, 10,000 shares, \$1,000,000 00	
City of Charleston.....	10,490 00
Individuals.....	2,787 00
	<hr/>
	278,700 00

By Full shares carried by contractors, issued, due or reserved.....	1,779 00	176,922 59
	<hr/>	
Shares.....	25,046 00	\$2,504,622 59

Received from State of South Carolina..	\$600,000 00
City of Charleston.....	502,050 00
Individuals.....	31,066 30
Earned by Contractors...	176,922 59
Due by State of S. Carolina..	400,000 00
Due by City of Charleston....	546,950 00
Due by Individuals.....	247,633 70
	<hr/>
	1,194,533 70

\$2,504,622 59

WM. H. PERONNEAU, Treasurer.

Charleston, November 1st, 1857.

Resources of the Company, exclusive of Subscriptions to Capital Stock.	
State guarantee of Mortgage Bonds.....	\$1,000,000 00
State aid to Pendleton Railroad.....	43,500 00
Private subscriptions to Pendleton Railroad.....	52,000 00
Private subscriptions to Blue Ridge Railroad Co., Georgia.....	3,600 00
Private subscriptions to Tennessee River Railroad Co., North Carolina..	55,400 00
Tennessee State aid (for iron).....	540,000 00
Do do do (for bridges).....	100,000 00
Subscriptions of Knox and Blount counties, and private subscriptions to Knoxville and Charleston Railroad,	250,000 00
Mortgage Bonds of the Company (first mortgage).....	1,500,000 00
	<hr/>
	\$3,544,500 00

The following interesting article on "*The Improvement of Impoverished Lands*," we find in the "*Genesee Farmer*," and commend it to the attention of our readers. It is from the pen of one of the most scientific agricultural writers of our day. Take his pen from him, and place a *plow and hoe* in his hands, and we are not quite certain that he would not be found to be one of the most *practical* workers of the day.—
ED. F. & P.

Improvement of Impoverished Land.

FRIEND HARRIS:—Waiving for the present further the discussion of analytical chemistry applied to the study of soils, allow me to congratulate your readers on receiving the very instructive article on "Natural and Artificial Drainage," which forms the leader in the February number of the *Farmer*, and to present for their consideration a few remarks on the improvement of impoverished land.

Mr. Edward Billingsley, of Zanesville, Illinois, says, in your last issue, that "the system of farming at the West has hitherto been an exhausting one, as though the fertility of the soil would last forever." He also calls attention to the fact that, while summer-fallows answer an excellent purpose on the clay lands of Europe, they are not adapted to the sandy, black mould, of this country; and he might have added, that our hot, tropical, and semi-tropical summers, over a large part of the United States, are not congenial to any large amount of plowing, or other tillage. Where the summer heat is much less, as in Great Britain, and

the aggregate of sunshine not only less, but feebler while it lasts, it requires at least twice as much tillage to decompose vegetable mold, and decompose earthy minerals, as is needed in this sunny clime. The most prominent and injurious error in American agriculture is the universal practice of going over too much surface with the plow. Nature never uses the plow, nor any other thing of like influence, in forming a rich mold, or in making a soil that abounds in all the earthy part of our most valuable crops. If a farmer turns over his manure heaps several times during the spring, summer and autumn, and permits rain and sunshine to fall upon them, the organic matter will rapidly ferment, rot and dissolve, and disappear; and in a few years, the manure, if thus treated, will be dissipated. The stirring of the soil by the implements of tillage, increases the growth of plants mainly because it intensifies those chemical actions which dissolve their food. After the food of plants is dissolved from the disintegration of mold and minerals by plowing and hoeing, the law of general distribution diffuses these elements of fertility as far and wide as moving water and moving atmosphere will carry them. If there were no natural agencies for the universal diffusion of plants over islands and continents, and, consequently, for the equal diffusion of their appropriate aliment, then there could be no waste, locally, from the decomposition of manure, and no loss of fertility by plowing alone. But when one transforms his manure into gases and soluble salts, he must be careful, or no inconsiderable share of these will be carried, in ever-moving air and water, beyond his premises. It is the diffusion of the organic elements accumulated in swamps and rich prairies that poisons the atmosphere for human respiration in the immediate vicinity, and causes malarious diseases. The results of the first breaking of large prairies illustrate not alone local phenomena, but the operation of natural laws that equally extend over the whole globe.

Of all the animals that subsist on the fruits of the earth, man alone tills it, and he alone impoverishes the land that supports him.

To avoid the needless dissipation and consumption of fertility in all virgin soils, and in all others, it is important not to cultivate more land than is strictly required to meet the real wants of the cultivator and the public. To illustrate my meaning, I will state that there are about one hundred million acres of good cotton lands in the Southern States, forty millions of which have been gone over with the plow so often, and so exhaustingly, as to be turned out as utterly worthless for tillage purposes. A continuance of the same policy of extending cultivation as the soil is impoverished, will reduce the other sixty million acres to a similar condition by the close of the present century. In this quarter, where a great commercial staple is grown for export, and where State and Congress lands cost next to nothing, to rejuvenate old plantations appears almost as difficult as to make an old man into a smart boy.

We have no large markets for fat sheep, cat-

tle, and hogs, as Mr. Johnston and others in New York have, to encourage us to produce a full supply of home-made manures; and Peruvian guano has cost \$80 a ton delivered in Athens, the past year; and other commercial fertilizers are equally high, as compared with their value. So long as military lands and others may be bought at 80 or 90 cents an acre, and the very best that belong to the Federal Government at \$1.25, who does not see that planters can make far more money to wear out large plantations and purchase more fresh land, than to buy manure or make it, to keep up the virgin fruitfulness of the soil? How far will \$1,000 go toward putting thirty-five loads per acre, of good stable or yard manure, over 800 acres of worn out land? Who will haul and spread the manure for a dollar and a quarter per acre?

Three years ago, I moved upon the farm where I now reside, which contains some 500 acres of old fields. One of the least worn was planted in corn, fairly cultivated, and a third of the crop came to me, which was not over a bushel to the acre. Selecting the best two acres I could find in a forty acre field, cultivated in corn, I had it well plowed, dressed with thirty bushels of good house ashes, and sown with two bushels of wheat. It grew some twelve inches high, and turned out about as much grain as was sown. Four acres adjoining were sown in barley, without fertilizers of any kind, and produced nothing. Other fields sown in oats and rye, when I came upon the place, did very little better than my barley and wheat. I fenced in a new field of seventy-five acres which has rested some fifteen years, and it affords grass (broomsedge) enough to keep five cows, a yoke of oxen and a horse six months in a year, with a little grain. As the negroes and mules did not earn ten cents a day by cultivating these old fields, they were taken by their owner to the rich and cheap lands at the southwest, whither so many thousands are going every year.

It is useless to talk about "renovating crops" grown on land too poor to produce cow peas, rye or Indian corn, in a good corn climate.—The true remedy for the evils that accrue from plowing and hoeing the soil until all its organic matter and soluble minerals are dissolved out, is to raise crops for manure long before the land is exhausted. Unless the readers of the *Farmer* expect to abandon their present farms at some future day, they should learn wisdom from the uniform experience of all cultivators, with but few exceptions, who have fairly worked out to the bitter end the practice of excessive tillage, joined with defective husbandry.—A badly developed civilization, and misapplied industry, demand more of American soil than it can possibly give and perpetuate its present fruitfulness. Mr. John Johnston sees this, and seeks to avoid the general impoverishment of the fertile region of Western New York, by urging its farmers to resort at once "to high feeding and high manuring." If I had the water that runs off in his under drains, to pass through land here that will not now yield over two or three bushels of corn per acre, I have

no doubt it would soon produce thirty bushels per acre. I am confident of such a result from the fact that wherever a natural spring issues from the ground on the plantation, no matter how poor the soil may be in its vicinity, the water that flows out in a little stream uniformly greatly enriches all the earth in any degree irrigated by it. On evaporating the clear spring water to dryness, it yields both combustible, organic matter, and mineral salts, or the dissolved food of agricultural plants. By clearing off all bushes, briars, and trees, along the borders of the several "branches," (as little streams of water are called in this country), ditching them where it is necessary, and turning the water out of its natural channels, as far as practicable, to increase the irrigation of the impoverished soil, I have no doubt that a full supply of corn and cheap manure might be obtained from these perennial fountains to enrich ultimately, aided by wise husbandry, the whole farm. No part of it is so far exhausted that it will not produce old field pines and mulberries; and the leaves of the latter make the best of leaf manure.

Where land is cheap and abundant, and withal thin and easily impoverished, forest culture is far better than to cut down the valuable timber on thousands and tens of thousands of acres, scourge the soil under a burning sun for a few years in cotton or corn culture, and then abandon it to repeat the operation elsewhere. Moving water which has passed over and through more or less vegetable matter on the ground, as well as through large masses of earth, assisted by that which drops from the clouds, and by the growth of forest trees, supplies the farmer with the cheapest known means for the improvement of poor soils. Without buying a dollar's worth of manure, and with a garden spot that would not produce ten bushels of corn per acre, and fields such as I have described, I have raised corn, meat, milk, butter and vegetables, beyond the wants of my family, by simply looking for their elements where others did not see them—in running water and in the subsoil.—Nevertheless, I have done next to nothing, compared with what might be done by one who knew that his bread and butter depended on his farming industry.

By saving all nightsoil, soap-suds, stable and other manure, and taking pains to augment the aggregate quantity by the free use of forest leaves, I have made a little land highly productive; and to one who seeks retirement and comfort, more than fame or riches, a small area is more desirable than a large plantation. Our Anglo-Saxon mania for farms of the amplest dimensions, and whole continents to overrun and desolate with the plow instead of the sword, is leading us into the most perilous temptations and follies. A wise government would not entice millions to wear out their paternal acres in the old States, with the expectation that Congress would sell them richer acres somewhere this side of sundown for a less sum than it will cost to fence their old homesteads.

A general knowledge of the principles of agriculture would soon correct most of the evils that now afflict American society, such as over-

trading, over-banking, and reckless speculations in lands, railroad and other stocks, city property and lottery gambling. It is by robbing the soil of its natural fruitfulness, that our population has the means to feed and foster habits of idleness, luxury, vice, crime and shamelessness, which could not exist if every cultivator performed the labor of making full recompense for all that the earth gives him. A fair restitution to the soil of the elements of fertility, would require more honest industry on the part of the community; would keep far more of the wealth of individuals and of States in farming lands, where it is safest and most useful to the republic and mankind at large. There would be less extravagance in cities and villages, and more real wealth and power in the country. A worn out farm is much like the dry bones of a dead horse—useful mainly as showing the extinction of life, and what has been by the mechanism of a curious organization. Some of the fossil remains of an old tobacco plantation exhausted before the Revolution, are as worthy of preservation in a museum as Dr. Franklin's printing press in the Patent Office.

If one were to commence in New Jersey, near the Hudson river, and travel south to the center of Georgia, inquiring of farmers and planters all the way what substances had been most useful in renovating partially exhausted soils, he would be told that shell marl and green sand had proved most available and efficient, in addition to the resources of the land itself. It would extend this article to an unreasonable length to cite authorities on this point; but at another time I will bring together many facts that appear to me important as a part of the agricultural history of the central and southern Atlantic States. The rocks, soils and climates of the extensive region more immediately subject to the influence of the Atlantic ocean and the Gulf Stream, differ widely from those of the still more expanded country lying west of the Alleghany mountains. Different localities have very unlike advantages and resources for the improvement of arated and depastured fields; and every farmer ought to study the fertilizers, of whatever sort, within his reach.

D. LEE.

Athens, Ga., Feb'y 12th, 1858.

Sugar made from the Chinese Sugar Cane.

We have received (says Prof. Mapes,) a letter from Joseph S. Lovering, Esq., of Philadelphia, accompanied by five samples of sugar and one of molasses, made from the *Sorghum Saccharatum*. Mr. Lovering is the proprietor of one of the largest and best regulated sugar refineries in the United States, and is a perfect master of his business. We were engaged for many years in the same business, and are therefore capable of judging of the process used, its practicability, etc. The experiments could not have been made by any person more capable, or whose results can be more fully depended upon, and we are glad to learn from such a source, that sugar may be made from the Chinese Sugar Cane. It is the first practical re-

sult, accompanied by such proofs, as would cause us to deem the raising of Chinese Sugar Cane, for the purpose of sugar making, feasible. Until the receipt of these, accompanied by the pamphlet of Mr. Lovering, we had supposed the sugar making season would be too short, as compared with that of Louisiana, as we naturally feared frost, in its deleterious effect upon the canes. The experience of Mr. Lovering, however, settles this question, as will be seen by his remarks on the effect of frost in the following article. He has also clearly shown that white or loaf sugar may be made without melting or refining, but simply by the use of the De Rosne Filter, liquoring, etc. Sample No. 7 is of this kind, and fully equal to the loaf sugar usually made by our refiners who do not use the vacuum pan. No. 5 is a white, and extremely well purged sugar. No. 4 is equal to the average of Louisiana sugars, with a better crystal, and more thoroughly purged of its molasses. The other, No. 3, is not well purged, very dark, and somewhat gummy, the causes for which are explained in Mr. Lovering's pamphlet, copied below. No. 2 is fairly crystalized, of good color, but not so thoroughly purged or dried as No. 4. All these samples show good firm crystals, and give evidence of the entire ability to crystalize under proper manipulation, particularly when operated upon in large quantities.

Our long acquaintance with Mr. Lovering and his ability, renders us free to say that we have no longer any doubt as to the entire practicability of sugar making from the *Sorghum Saccharatum*, in any State where the seed may be ripened. We shall in an early number suggest proper apparatus for small operations.

The above is taken from the "Working Farmer," in which the letter referred to, follows, but from its great length we must pass it over, having published already much on this subject.—Ed. F. & P.

From the Unionville Journal.

Report

On Sheep Husbandry, read before the Union District Agricultural Society.

Sheep husbandry is coeval with civilization, and has ever held a respectable position. Wool growing is now next in importance to our great staple, cotton. Stop the production of either, and you starve thousands of human beings; increase the production of either, and you proportionally make glad and comfortable many by affording them the means of subsistence. Had the subject no other claim upon our attention, the above fact should induce us to produce more wool than we could consume. But it has, as it can be made profitable to us, and is so, wherever proper attention and study is given to it. It is admitted, that sheep, although close feeders, improve the land upon which they graze; while all other stock, except, probably, hogs, injure it. They mature earlier, are subject to as few diseases as any stock, will live and thrive upon pastures, upon which a cow would starve, increase rapidly,

provided the dogs let them alone. The high price which pork and bacon command now a days, is well calculated to make us think of some substitute. It is a pretty expensive operation to raise a hog—it is had economy to slaughter pigs for the table. So little attention is given by the mass of Southern planters, to the subject of sheep husbandry, that, probably one or two short articles a year, on the subject in each Southern agricultural paper is published; so unimportant is the subject considered.—Were we able to write ever so forcibly upon this subject, we would deem it time and labor lost in trying to change the general planting economy of our district. Cotton is the "sine qua non;" even the grain crop is neglected, to make more cotton. Hence your committee will not weary you with a long report as to the various reasons why you should give more attention to an interest in sheep husbandry. But simply give you their experience in breeding and raising sheep, for the benefit of those who may take an interest in sheep husbandry.

In the first place, it is important that we should select the breed best adapted to our peculiar locality and purposes. When the locality is thin and hilly land, select large and heavy bone breeders; for level and richer localities, a medium size, always, in any locality, selecting for breeders, healthy sheep, also, those of the most perfect symmetry, with greatest aptitude to fatten, separating the puny and small animals for sale and mutton. By this plan, although we may breed several years from the same buck, we may improve our stock. Our breeders, especially the buck, should be full grown, say, eighteen months to two years old.

Varieties.—The sheep best adapted to our climate and treatment, is a cross of the Southdown upon the native. We have seen a great improvement by a dash of Merino blood—the Merino is proverbially hardy and free from lung diseases. The full blood Merino will not suit our purposes, as they are too long in maturing, and the wool is too fine for domestic purposes. We have heard it said, that the broad tail or Tunisian sheep was remarkably hardy and well adapted to our climate and short pastures—they are a coarse woolled sheep and not as prolific as the Southdowns.

Treatment.—The sheep is partial to particular food, and if the pasture become deficient in what suits his taste, he is very apt to decline, (or jumps into the neighbors field.)

They soon eat out that which is most palatable, and should be removed at once. No animal relishes his salt more, and he should be regularly supplied with it, at least once a week and oftener if rainy weather. Sheep will always come up before a shower for salt. During winter they should be protected by shelters, brush piles or pine woods, from the cold winds and rains, and if possible pasture provided for them. Wheat, rye or barley, cotton seed in moderate quantities with a little bran, makes a very good winter food. During the yearning season, it is very important to have the young lambs cared for. If they can only be watched for a few days, they will take care of themselves. No hogs should be allowed access to the sheep fold, and it

will be found best always to pen them at this season by themselves. The lambing if possible should take place before the first of January. Late lambs are worth very little, and are a deal of trouble.

Shearing.—It is bad policy to shear sheep more than once a year—a flock will soon run out by this treatment, unless a degree of care is exercised, not common among us. After being sheared—smear the nose well with tar, and turn them into a woods pasture, the sun is very severe upon their bare backs, and the dews, at night at this season equally so—they escape both in the woods.

Diseases.—The sheep is more troubled by lung affections than any thing else. Tar we believe to be the best remedy—and the best prevention which is more important—plenty of food and protection from severe changes of weather.

For scours, a common disease among sheep—salt and soot will be found very efficient—while the addition of a little sulphur now and then will be very beneficial in keeping off lice, sometimes very injurious to sheep.

But there is very little use in any farmer experimenting in sheep raising, either for pleasure or profit, so long as the country is infested by “mongrel puppy, whelp and hound and cur of low degree.” Until this evil is remedied we may expect to do without our wool or our mutton.

According to the last census there are 969 farmers in this district. The total white population of the district was 9,317. Free colored 143. Slaves 10,392. Total 19,852.

The number of sheep, was 7,360.

Product of wool 12,497—showing an average of but a little over $1\frac{1}{2}$ lbs per head—which affords conclusive evidence of the small care bestowed upon this department of husbandry.

According to the best data upon which we can base a calculation, there must be about 4,845 dogs in this district. How many of them are worth the powder and lead it would take to kill them? Will it not take more to raise and keep a dog than sheep?

Corn is now worth one dollar per bushel—at the lowest estimate a dog will consume 5 bushels per annum. Hence it will appear that the dogs of the district are a direct tax upon it of \$24,225 per annum—and what makes the matter worse, it is a tax which involves absolute suffering, for the bread is indispensable to the wants of life. A worthless dog may destroy more sheep in in one night than would feed a dozen families a week. Your committee are of the opinion that so long as the present state of things exist, there is no encouragement for improving the breed of sheep—they would therefore recommend that the legislature pass some law to protect the sheep owner. If the dog be a valuable animal or a necessary luxury, there can be no good reason assigned why he should not be taxed. He should be taxed or made responsible for his acts, which would be hard to do—for a sheep killing dog is hard to catch and very often his master is not worth the sheep.

Respectfully submitted,

W. GAGE, Chm.

State Agricultural Society.

We are indebted to the Secretary of the above Society, for a pamphlet copy of the Annual Address, delivered by Col. Andrew P. Calhoun, on Tuesday, November 10th, 1857. We refer to this Address now, not only to return our thanks for the courtesy of the Secretary, but to call the attention of our planters to the importance of the Society to their most vital interests, and to suggest once more, the expediency, nay, the necessity for forming auxiliaries to aid in the great object of its organization—the promotion of agriculture throughout the State. The Pee Dee valley is second in natural fertility, to no other section of the State, and its productions need only be brought in fair competition with those of other sections, to confirm this truth. Agricultural progress, too, has been advancing as rapidly in the Districts bordering the Pee Dee, as in any others in the State. Why, then, should they stand isolated from their sister Districts in the work of progress? Can our successful planters imagine that they are in no degree responsible for whatever defects mar the general progress of agriculture throughout the State? We think not. Every improvement in the great art of planting should be held to be the property of every planter in the State. No one has a right to hide his light under a bushel. And there is no medium through which this great body of planters can be reached as through organized Associations. It is at our Agricultural Fairs that progress and success are advertised, so that all may learn to profit by the labors of others. It is there that the planters of the Pee Dee, the Wateree, the Congaree, and the Savannah, and of the seaboard and of the mountains, meet to exhibit the substantial and pleasing evidences of their progress and success, and to instruct each other in the great art of arts. We feel this to be so, and we feel that we cannot urge too earnestly this important matter upon the attention of our planter friends.

We had the pleasure of attending the last annual Fair of the State Agricultural Society, and the hours spent in the Fair grounds, among the large concourse of planters, and in examining and admiring the fine animals, the noble products of the soil, the beautiful and interesting samples of mechanical and manufacturing skill, and “last though not least,” the many tasteful, ornamental and useful products of domestic industry and ingenuity on exhibition by the fair daughters of the State, will long be remembered by us with the most pleasing emotions. And yet there was a drawback, a sad drawback, to our pleasures on that occasion. In the long range of cattle sheds, the numerous stalls for horses, and ample pens for hogs, the Pee Dee Districts had not a representative. We passed through the buildings, and admired the fine samples of corn, wheat, potatoes, the numerous jars of golden butter, of pickles, of preserves, of jams, lard, &c., together with the many interesting specimens of mechanical and manufacturing industry, interspersed with the products

of the fairest of the fair; but nowhere did we meet with the representatives of the Pec Dee Districts, save, we believe, in a few bottles of wine and a case of shoes! Planters of the Pec Dee, this should not be so. You have the soil, the industry and the skill, to compete with the planters of any other section of the State. And we feel, too, had you visited the last Fair with us, you would have felt the pleasures of that visit much lessened by the absence of the superior products of your soil, skill and industry. We would urge, you, then, at once to prepare to meet your rival friends and fellow laborers in a common cause, at the ensuing Fair. The Executive Committee have extended their range of premiums, and for the ensuing Fair a larger amount has been offered to successful competitors, than has ever been offered by any State Institution. You need but exert yourselves to secure the prizes.

The address of Mr. Calhoun is a most admirable production. It should be read by every planter in the State. But we must content ourself with a single extract, and that bearing upon but a single point, doubly interesting at this moment, when the planter is to be fleeced of his earnings by the cunning and chicanery of those who live by tithing his industry. It is as follows:

"In the silent paths of his honest and practical life, the planter soon learns that as an integral link in the great chain of humanity, he is often pressed to chafing by the laws intended to support antagonistical interest to his own. He feels he supplies the sinews of war—the luxuries of peace—that every vessel that goes down to the sea, is freighted with his labors, and while the wide world is stimulated to activity by his productions, he, in his quiet home, is lost sight of, and only viewed as a hewer of wood and drawer of water, by those who take the supplies as they spring from the bosom of nature, and transfer them to suit the various wants of the world. In commerce he sees his raw material in the hands of trade, shipped to distant points, and the profits making merchant princess—he follows the same to the great factories and looms, where elements, controlled by man, starts into action a moving panorama, and from cellar to attic, the groan of the conquered agency whirls the noiseless machinery into combinations, from which issues fabrics, which give comfort to the poor, pride to the rich, and sends rejoicing upon the ocean, that munificent commerce, under whose white spread symbols the condition of man is ameliorated, and civilization quickened. He here finds the manufacturers, the third removed from the tillage of the earth, amassing fabulous wealth, and in pomp and circumstance, wielding almost dynastic influence. Into the great warehouses of stupendous trade, he again finds in its various gradations the retailer distributing in all its removes, the vast wealth of these stamped fabrics, and riches greater than ever narrated in "Eastern story," crowning and investing with regal power all those whose good fortune or genius has given them position. Then, again, he sees those who rule over the affairs of men, no matter under what

form, monarchy or republic, demanding from the rich freights of commerce, their share. At the portals of trade they station their sentinels, who demand of every Argonaut who enters, a clip from their golden fleece. This wealth, thus cunningly raised, goes into the treasures of power, and is doled out to the flatterer, the sycophant, to all who will bend the "pregnant hinges of the knee, that thrift may follow fawning." At this point an antagonism springs up between the people and their rulers. The tiller of the soil sees from the time his staples have left his hands, up to this point, a constant accession of power and strength, and all between himself and the assumptions of government, dependent upon the latter for patronage and support. He feels he is the prey in this arrangement, and indignantly seeks a remedy. But he lives isolated in rural districts, and has to compete with the men of cities, and compact masses, whose moral perceptions are too often dulled by misuse, and whose wits are sharpened by use, and in despair, after being abused, cajoled, ridiculed, he submits to his fate."—*Cheraw Gazette*.

From the Southern Planter.

Raising Hogs.

Oxford, N. C., Jan. 13th, 1858.

Mr. Editor,—As I have nothing to do and so much time to spare, I thought I would drop you a hint about hogs. The raising of pork is no small item to every good farmer. In the South, without a plenty of this important article, no good master can feel contented; and since my return from the South and West, where I heard so much talk about the supply from the West being cut off by that dreadful scourge known as the *hog cholera*, I feel it a duty to my brother farmers to give them my experience in raising hogs for the last twelve years.

The first year that I set out on my own hook, I was well cared for by my father, who gave me a plenty of stock of all kinds to commence with. I was, and always have been, partial to hog raising, so I gave my hogs all the care I could. I paid much attention to the breed, and what few I raised I thought of a superior kind, being a cross on the Snapdragon, Berkshire and Irish Grazier.

Well, Mr. Editor, with this fine breed of hogs, (as they have since proved to be,) I could scarcely raise pork enough for the first three years of my farming life. My hogs would sicken and die, do what I would, with some disease or other. On one occasion, while examining my hogs in a pine field, I noticed the best and fattest of them were employed in rooting up pine roots and eating them greedily, while those in lower plight cared little or nothing for them, and contented themselves with grass. I observed this several times, and came to this conclusion: that it could not be for the sustenance that the fattest and best of my hogs were devouring these roots so greedily; if it was, why did not the poor ones seem as anxious to get the roots? And again, why was it that whenever I lost a hog or shoat, it was one in fine condition?

I am now fully satisfied that my conclusion was correct, that it was not for the sustenance that they eat the root, but that it is a hog medicine, and they use it, and know it by instinct as the dog resorts to grass for all of his ailments. Being satisfied for what purpose the pine root was used by the hog, I determined to try this remedy in a more concentrated form, so I got the spirits of turpentine, knowing that was a strong anthelmintic and diuretic, commenced giving my hogs a common teaspoonful to every hog that was weaned from the mother. They soon gave strong indications of health; and to show on what my confidence is built, since 1847, I have not lost a hog of any description, or kind, that I know of, from disease of any kind.

It may be that the spirits of turpentine may relieve the hog cholera. It can be used in a simple manner: just take a quart of shell-corn, or wheat, put it in a tub and measure a teaspoonful per head to all of your hogs. Be careful to mix the turpentine well in the vessel, and then scatter it over the ground so that each one gets his share.

W. L.

REMARKS.—The above prescription is very near the same as our proposed remedy (tar) in a late number of the Farmer and Planter.—Ed. F. & P.

“Holding on to Cotton and its Effects.”

MR. EDITOR:—An article under the above caption, from the New York Day Book, has been going the rounds of the newspapers for some time. It is a little remarkable how such a palpable misrepresentation of the true state of things could be suffered to pass unnoticed.—The writer asserts that the cause of the present distress among many of the Northern merchants, is owing to the indebtedness of Southern merchants to them, who cannot pay, simply because the planters won't sell their cotton. An appeal is made to the Southern planter “to sell as soon as possible, and sustain the character of the South, by discharging the debt she owes, rather than hold on months longer, and produce the downfall of a large class of Northern creditors who have waited long, and are still waiting, with a full reliance and faith upon the determination of these Southern customers to maintain their hitherto high reputation for soundness and reliability,” &c.

Now, Mr. Editor, the financial pressure among Northern merchants, springs from no such cause. It can be traced to altogether different circumstances. But that is not our business at present. All this talk of Southern indebtedness to the North, is mere moonshine. Our merchants may owe for their goods; we don't doubt that. Their customers, the planters, may owe them, and delay payments, because they haven't sold their cotton. This may be true, also—but the indebtedness, in the main, is to the banks at home; these legalized brokers' offices or shaving-shops that have come between the Southern and Northern merchants, to reap the richer harvest.

Everybody at all familiar with business, knows how these things are managed now-a-days. One of our merchants could not borrow of a

bank here, \$1000 upon a note endorsed by half the District, to go North to buy goods, simply because it pays only 6 per cent. The New York merchant tells him “we don't want your money; just give us your note payable at any South Carolina bank.” The ink is hardly dry before this note is bought by the very bank, perhaps, which refused to lend him money on a good note, and transferred by the agent to the bank at home for collection. It has been *shaved* at 12 or 15 per cent. Who pays for the operation? The planter, who buys the goods, and who is now entreated to sell his cotton at a sacrifice to save the operators. For the last four months we have heard this ding dong from the newspapers, the factors, the merchants, the banks and the cotton buyers, (who, for the most part, are mere bank puppets,) to ‘sell your cotton.’ In the face of a small balance of last year's crop unconsumed, and a small crop this year (1857,) to come in, we have been told cotton must go down, down, down. The panic has been hurled at us to boot; and now as the storm is over, and advices from Europe of a more favorable character, being constantly received, we are greeted with the same cry—“sell your cotton before it is too late” Cotton is better than specie, because it is a bill of exchange, and not an exponent of wealth only, but a creator of wealth.—*Ex.*

HOLD ON.

TO PRESERVE LEATHER.—Add to one pint of animal oil, a piece of India rubber the size of a hen's egg, or its equivalent. then apply heat until the India rubber is dissolved. If this is applied warm to leather which is free from paste and dirt, a very large amount of it will be absorbed, and the leather will thus be rendered water-proof and much more durable. It is a very cheap and excellent compound to be put upon boots and shoes.

Farmers whose boots are almost constantly exposed to water and snow, during the stormy season, often lose much of comfort as well as money, by not properly protecting the leather.
[Wisconsin Farmer.]

MORTAR.—The ancients made a kind of mortar so very hard and binding, that it is now found to be almost impossible to separate the parts of some of their buildings. The lime used in these harder mortars is said to have been prepared from the very hardest stones, sometimes from marble. Fine sand makes weak, and coarse sand strong mortars, and the sand should be washed before mixing, to obtain the large grains. The lime should be thoroughly burned, and perfectly white. The principle on which it hardens is, that the lime absorbs carbonic acid from the air, and hardens, forming a concrete round the grains of sand.—It was customary to mix with the lime and sand, chopped straw, but cow's hair has been substituted; this is only introduced to cause it to bind together, and prevent cracking in the drying. It is only used for the prime coat.—*Scientific American.*

Two drachms of sugar of lead dissolved in a quart of water, is good for inflamed teats.



The Farmer and Planter.

PENDLETON, S. C.

Vol. IX, No. 5, : : : : May, 1858.

Sheep and Dogs.

We re-publish in this number, from the "Unionville Journal," a "Report on Sheep Husbandry, read before the Union District Agricultural Society," by C. GAGE, Esq., Chairman of the Committee, to which we call the attention of all would-be sheep raisers in our State, and especially to the closing remarks of the Committee, on dogs. We are informed by the Committee, that there are, in the District of Union, 7,360 sheep, and 4,845 dogs—not two sheep for each dog in the District to kill—a light job, indeed, when it is known many a dog has slain his score or more in one night.—The Committee recommended to tax dogs, or make them responsible for their acts. The former would undoubtedly be the proper remedy for the evil, for as the Committee say, it is difficult to detect a sheep killing dog. We, with the assistance of several gentlemen of the House and Senate, made a strong effort to get a bill through the Legislature, on the last day of the last Session, which had been neglected to be reported on in time by the Committee that had it in charge, for the protection of sheep and other stock; but one clause in the bill was objected to; and although its friends were willing, and endeavored to amend it so as to make it acceptable to an overwhelming majority of the House, yet at that stage of the Session, it was necessary to have the unanimous consent of the House to its amendment. And on putting it to the test, to our great mortification—we might, as some of our friends say, add chagrin—one member, a single member, from the good old District of Newberry, objected, (wonder if they have more dogs in Newberry than sheep?) upon which a legal gentleman from Abbeville, who doubtless knows more about law than sheep raising, moved to postpone the further consideration of the whole matter, and so the bill was lost. However, we are not disposed to give up in despair; for although we shall not be a member of the next Legislature, we have the promise of many gentlemen that *will* be there, to keep the ball in motion; and we are determined to vote for no man who is not in favor of some law for the protection of stock from the depredations of the thousands of *worse* than useless dogs in our State. And we believe it would be well to make it a test in all the districts, believing as we do, from

having conversed with very many voters on the subject, that the advocates of some such law would be sustained in preference to dog-protecting candidates. We have conversed with gentlemen owning packs of hounds, that were in favor of a tax, and we found but little opposition in the Legislature to a dog law of some kind. We believe that our State, especially the upper division of it, is as well adapted to sheep raising as any other in the Union; but before we can ever raise that most useful animal successfully, some law *must* be enacted which will have the effect of *greatly* reducing the number of dogs now in it. We conversed, a few days since, with a gentleman living in Pickens District, who informed us that, of a flock of some 50 or 60 head, we think, a year or two since, he could not now find a single sheep; and we have fared not much better at a place of our own on the opposite side of the river. He informed us further, that a great number of sheep in the range between Keowee and Twelve Mile rivers had been destroyed by dogs within the last year—that he knew several clever gentlemen, the owners of packs of hot hounds, that "followed sheep killing dogs, and they knew them to be such." Now, we think such gentlemen should be made to respond in ample damages for all the sheep killed by dogs within the range of their fox hunting excursions. Their dogs do more injury to the country than would ten or a hundred times the number of foxes they destroy. We blame no man for fox hunting; it is a healthful, enlivening sport; we followed it at one time ourselves with much pleasure, but we kept no sheep killing dogs for our sport.

Col. Calhoun's Address, Col. Gage's Essays, and Mr. Woodward's Essay on Pisciculture.

In this number will be found under the head, "State Agricultural Society," a handsome and well merited compliment to the late Annual Address before the State Agricultural Society, delivered by the President, Col. A. P. CALHOUN, at our Fair, in November last. The address was published by order of the Society, in pamphlet form, and by order of *ourselves*, in the Farmer and Planter, February No. A thousand copies were published in pamphlet form, and double that number in the Farmer and Planter; most of which have been distributed, and have, without doubt, been read with great interest and satisfaction by very many citizens of our State and sister States South. Yet, not a fourth of the farmers and planters of our State have even seen or perhaps heard of it, that should, for their own interest, have read it, for a thousand copies, if distributed altogether, to those who are not subscribers to the Farmer and Planter, and considerably under *two* thousand in the latter, would fall very far short of supplying all that should have been in possession of it. But it is more than probable that all self-conceited anti-book farmers—and there are a superabundance of such in our State, perhaps more than in any other State in the Union—would consider it a loss of time to sit down and read it—would greatly prefer reading the everlasting Kansas discus-

sion. Let all such men alone, they are joined to their idols.

Below will be found a notice from "Hall's Journal of Health," of Col. GAGE's Essay on Hygiene, published in our last volume. Our friend has much reason to be proud of such a notice—coming from such a source, it is worth more as a compliment, than half a score of silver cups. Notice from such a quarter must make a man feel that he may be doing good, and should stimulate him to take up his pen again. This Col. G. has done, even before seeing this notice, or perhaps any other, for we know our Southern papers have been very sparing of their compliments; and *we*, amongst the rest, must confess, have been very neglectful of our duty in not speaking of both Addresses and Essays published in the Farmer and Planter for the last two years, in terms that they meritoriously claimed. It has not been, however, from a want of all due regard for the writers, or for a proper appreciation of their productions; and we, therefore, have nothing to plead but downright neglect. But we stated above that Col. GAGE had again taken up his pen, and the result is his admirable Essay on Meteorology applied to Southern Agriculture, to which was awarded a premium at our late Fair, and which should be read and studied by every book-farmer and planter in the South. We repeat his remarks on the seasons, &c., &c., &c.:

"Every planter of common observation, has doubtless been struck by the increasing uncertainty of the season; the recurrence, at short intervals, of severe droughts; the drying up of springs and water courses; the sudden changes of temperature; the late frosts of spring, and early ones of fall. * * * Our water courses are annually becoming less navigable, and as the beds fill up, the valleys become more subject to inundation, thereby bringing upon us two of the greatest evils—a deficiency in the crops, and an increase of sickness. Can we attribute this state of things to any more satisfactory cause than the reckless clearing up of our forests, and the washing away of the soil—a necessary consequence of our shallow system of plowing?"

See what is said of a "River Police," (would to God we had such Police,)—on "filling up water courses"—on "turning out old fields"—of "ponds and marshes"—of "fog clouds" &c.—("Murray" in our copy should be *Maury*)—a "sponge and brickbat," as compared with deep and shallow plowing. See remarks on "planting season"—the "selection of timber"—on the "seasons" weather. signs. &c., &c. And in conclusion, we say see the *whole article*, read and study it. If you have let the children tear up your February number, write, and we will send you another. You shall have no excuse.

And again we would say—

Ho, all ye lovers of fishes,

Look down upon this feast of dishes!

Which friend WOODWARD has set before us in the March number, and eat, in imagination, to your utmost gastronomic capacity. Don't be alarmed; good read-

er, we are not choked on a fish bone, but have only swallowed a verse or two of old Tassier and a leaf of Webster. But "we would say" again, turn to our March number, and read carefully the most interesting Essay of T. W. WOODWARD, Esq., on "*Pisciculture*," and then answer us the question—why can't any man—or woman if you please, for many of them are more enterprising than most men—have a fish pond and raise fish just as easily as they can chickens, ducks and turkeys? We might, if asked, give two or three reasons why the thing is not attempted by every body; the first is, that many men cannot afford to loose the time from the cotton and corn field—which reason, also prevents them from having gardens; a second one is, that some caring nothing about this luxury themselves, have no disposition to procure it for others; and a third one might be the reason given by "Quill," for his mother's not baking the bread, which we will leave our readers who have not heard it, to guess at—and as neither of the former reasons apply to *ourselves*, of course we must submit to the latter.

In setting out, Mr. WOODWARD says:

"Believing the subject of *Pisciculture* to be one in which there is considerable interest manifested, and regarding it as intimately allied to agriculture, I have prevailed upon myself (although unaccustomed to handling the grey goosequill,) to intrude upon you the following report on the above mentioned subject; offering, moreover, as a plea, an honest desire to be reckoned among those who are at all times willing and anxious to contribute "a mite" for the good of our citizens and to public enterprise generally."

And Mr. W. has fully demonstrated the truth of his position, in contributing this excellent practical Essay "for the good of" his fellowman. But we are spinning out our remarks to a much greater length than was at first intended, and recollecting that we have above referred to Dr. HALL's notice of Col. GAGE's Essay, without further remarks we give it:

"Col. R. J. Gage, of South Carolina, has communicated to the *Farmer and Planter*, an article on 'Plantation Hygiene,' embodying facts in relation to the connection between clearing lands and health, which should be published in every newspaper; showing why localities suddenly become unhealthful, which had been remarkable for fertility."

Premium List for 1858---Errors Corrected.

We have received the thanks of Col. GAGE, Secretary and Treasurer, for having got out so promptly, and, with the exception of "a few typographical errors," so *well* the Premium List. He says, "the Carolina Office made me spell *vase*, *vace*, and you make me spell *hermetically*, *hermetrically*." That is true, Col., and we take back that *r*, which has no business in such company. We detected the error in *vase*, and thought we had corrected it—but if we did, our printer has, we find, passed over it and stuck to his copy.

Again, "That Porcelain, Granite and Stone Ware 'Salt Stand,' is a mistake—it should have been South Carolina made, or South Carolina manufacture."

The Blue Ridge Rail Road.

That section of the Road from Anderson to Pendleton, some 13 miles, heretofore known as the Pendleton Rail Road, has been completed and a very superior engine, the "Blue Ridge," with open platform cars, is now making her daily trips to our Village. On Thursday, the 8th of April, we celebrated the event in a grand jubilant festival, rarely surpassed in the country. We presume, of which the most laudatory accounts have been given by our neighbors of the Pickens and Anderson papers. But we very much fear we have "halloo'd before we got out of the woods," for by a most unreasonable and oppressive tariff of freights that have been attempted to be forced on us, the community have become so exasperated as to threaten indignation meetings, if nothing worse; and most of our merchants have, we understand, determined on employing waggons, which will cost them less to bring their goods from Anderson, than by Rail Road. With all due respect for, and deference to the judgment of the officers having the Road in charge, we must be allowed to express the opinion—and in it we are not alone—that a most suicidal policy is being pursued in this matter—one calculated to make enemies instead of friends.

We can but believe, however, when the Board of Directors come together, such steps will be taken as to reconcile all parties. But if not, we will venture the assertion that, when the Blue Ridge Rail Road again knocks at the door of the Legislature, she will find none from this quarter to open it. In conclusion, we would remark that the freights charged from Anderson to Pendleton, would amount to a prohibition, if extended to Charleston, viz.: Cotton, \$7.69 per bale; and flour, \$2.87 per sack.

Our Paper.

We congratulate our readers on being able to send them out a much fairer sheet than we have heretofore done. Our paper-makers have greatly improved the quality of their paper, and promise to do better still. We also expect to obtain from them colored paper for our backs in future. We are taking all possible pains to make a clear and fine impression, and if we could only get "a white man's chance," in the way of patronage, as other agricultural papers do, we would trim and send out as neat a pamphlet as any of them can boast of—but we cannot afford it with our present penurious support.

The "Pendleton Messenger."

It is proposed by Mr. EDWARD SYMMES, of our Village, to revive this once very popular paper in our State. Our young friend is fully competent to the task of editing a paper, and should he succeed in the undertaking as well as did his father, the late Dr. F. W. SYMMES, it will be highly gratifying to his friends, and especially to the old patrons of the former "Messenger." We refer our readers to the Prospectus on our advertising sheet.

Southern Commercial Convention.

The next Convention will meet at Montgomery, Ala., on the 10th of May. We find in some of our exchanges the address of the Committee appointed at the last Convention at Knoxville, to the people of the South and Southwest. Gov. ALSTON has appointed Delegates from the State at large, but we have heard of none having been appointed by the Districts. It is hoped, however, there will be such appointments throughout the State; and that when they meet, something more than *talk* will be done. If the Delegates can only agree among themselves to get up, on returning home, Exporting Companies, so that planters may export their own cotton, instead of selling to speculators at from one to two cents less than the article is worth, according to prices abroad, as has been the case throughout the whole cotton selling season just passed, something important will be gained. Producers never have been more imposed upon, and yet the papers throughout the South, with but few exceptions, so far as we have seen, have been all the time advising, *urging* the planters to sell their cotton and *save* the merchants. With a thousand false reports about the stopping of looms and the overwhelming crop, they have been actually scared into selling their cotton, for which, by holding on to one month longer, they might have obtained greatly enhanced prices. We refer our readers to an article—"Holding on to Cotton and its Effects," which we have taken from some exchange without credit, in this number: "Hold on," is on the right track.

Acknowledgements.

We are under many obligations to our Hon. Senators and Representatives in Congress, for favors. Judge EVANS, Gov. HAMMOND, Col. ORR and Gen. BONHAM are especially entitled to our thanks for their attention. Besides Sundry Congressional Documents, seeds, &c., &c., from all, we have received from our greatly esteemed friend, Gen. BONHAM, five volumes of "*Reports of Explorations and Surveys to ascertain the most Practical and Economical Route for a Railroad from the Mississippi River to the Pacific.*" This is a work that we should long hesitate to fix a price on. Really, General, this is one of the best "*signs*" that we have recognized in a great while; again, a thousand thanks to you. The Hon. Commissioner of Patents, also, will accept our thanks for his favors.

Langstroth's Patent Bee Hive.

We refer to an article from the "Dollar Newspaper," written by P. J. MAHAN, in answer to some inquiries about and remarks on Langstroth's Patent Bee Hive; and inform our readers that we shall be prepared in a short time to sell Hives and Rights to use in our State or elsewhere, where the Right for the State or District has not been sold.

To Correspondents.

We have received two communications—one by "Aiken," which is drawn out by the article of "Pendleton," in our last number; and the other by "E. E. E.," advocating weeds—both of which we would be pleased to publish if the writers will send us their proper names. Our rule is, to publish no communication from a gentleman unless his name accompanies it, and it is a rule that we have in a very few instances departed from, and prefer adhering to strictly. This rule only applies to gentlemen—ladies may not, if they choose, observe it. We are bringing our *guns* to bear on "Broomsedge's" weedy breastwork, but have not yet quite ammunition enough in store to renew the attack, and we fear, with his new recruits, he will give us a hot reception in June.

We have received a communication from T. W. WOODWARD, Esq., in answer to "Piscator," but too late for this number. Shall appear in our next.

Winter's Patent Mulay Saw Mill.

We have heretofore neglected to call the attention of Mill owners, or those desiring to go into the Saw Mill business, to the above named Mill, the advertisement of which, with several certificates, will be found in this and subsequent numbers. No man owning one of the old fashioned, clumsy Sash Saw Mills, should hesitate to tear out his sash and substitute the "Mulay;" nor should any man intending to build a new mill, think of building any but the "Mulay"—unless he is situated where he can dispose of a large amount of lumber, and may prefer the Circular Saw; and even then he would find it less expensive to put up and superintend two or three "Mulays," than one Circular Saw.

We are authorized to sell State, District or Individual Rights, and will attend to the same promptly when called on or written to.

Our Exchanges.

Since our last issue, we have received Nos. 1 and 2 of the "Clarendon Banner," a large and well filled sheet, which the character, Mr. J. W. ERVIN, the Editor, sustains as a writer, must make a most popular journal. The "Banner" is published weekly, by CALVO & Co., at Manning, Clarendon District, at \$2 in advance. We will exchange with pleasure.

"The Mountain Echo," a neat and interesting little sheet, as are no doubt the young ladies who contribute to its columns, is received from the Spartanburg Female College, edited by the Faculty and Pupils. Monthly, at 50 cents per annum. Shall be pleased to exchange.

To the editors of our old and excellent list of exchanges, who are from time to time speaking a good word for us, we say, thank you, brethren, a thousand times over. May your shadows never grow less.

The Harmon Proposition.

We are authorized to state that Col. R. J. GAGE will take a chance at the Harmon "Essay;" and just as we were going to press, we received the following from Maj. THOS. DAVIS, of Columbia. What say you all, gentlemen?

GEORGE SEABORN, Esq.—Sir:—In the Farmer and Planter for this month, I see an offer from Mr. Harmon of \$100 for an essay on the improvement of our wet and exhausted lands.

Now, would not \$500 be a more likely sum to bring talent to the production of an essay, the suggestions of which will be better worth our consideration or adoption, than so small a sum as \$100?

I respectfully submit this to your and his consideration, and I will be one of fifty to give ten dollars each, for an essay on this very important subject. Mr. E. Hope, of Columbia, will give \$10, also, for the same object.

I am, very truly,

THOMAS DAVIS.

Columbia, S. C., April 19th, 1858.

Correspondents to the Farmer and Planter.

An esteemed friend from Leesville, writes us as follows:

"I am glad to see your paper doing so well. I think it gets better as it grows older. Some of your contributors are making themselves useful to others. If they should tire of well doing, may you always find others to come to your aid in time of need."

Amen, say we, General. Most of our old friends do stick to us like brothers. Some have grown weary and have either abandoned the field, or taken a stump—perhaps they may bring up their row after taking a rest. In the mean time, we have, every now and then, a new recruit, who takes hold with a zeal that is worthy of the cause. Would that we could have daily accessions to our force, for although we have a wide field from which we may, by industry and perseverance, gather much valuable food for our readers—yet we would be pleased to be able to make up the Farmer and Planter entirely of original matter. We trust our friend will give us help as soon as he passes through the heat and burthen of his own crop, for there is danger of his row in our field becoming weedy, if much longer neglected, and we do hope he is not an advocate of weeds.

CALIFORNIA SOAP.—Five lbs. of white bar soap, or yellow, if white cannot be had; four lbs. sal soda; one half lb. borax, one ounce of ammonia, mixed with twenty-five quarts of pure soft water, rain-water is best. The water should be heated and the soap is dissolved in it. The other articles should be dissolved in a separate vessel in a few quarts of water, a few quarts out of the twenty-five quarts. When all is dissolved, mix them, stirring the mess well as they are poured together.—Valley Farmer.

Delinquents.

An esteemed friend and subscriber, in sending up his subscription, writes us as follows. We thank him most sincerely for his kind regard, and wish as sincerely, that every man had the soul of W. T. C.; if so, there would be no necessity for "handing round" any subscriber; but it is a lamentable fact that some of

— "Mankind are unco weak,
An little to be trusted;
If self the wav-ring balance shake,
It's really right adjusted."

Such men, we think it is proper to expose, as they may not swindle others as they have us. And hence we expect to hand round many more names before the close of our volume. We know we have many honest and honorable subscribers who have neglected to pay for *their* or *our* paper, as punctually as they should have done, but it is from neglect, and not—we are sure—from any disposition to defraud us of our just and hardy earned dues. We charge nothing for laying out of the use of our money; hence our subscribers *ought* to be the more punctual in their payments; but it is a small matter yearly, and is consequently neglected. If we had a list of five to ten thousand subscribers, we could better afford to wait, and even *loose* some debts, but with our scanty list, we cannot, without great sacrifice, either wait or loose; and consequently, shall be compelled to take leave of our old friends and patrons at the close of the current volume—though reluctantly it may be.

In our weed fight, friend "Broomsedge" seems to think he has discovered a pretty strong disposition in us to take to our heels, but having held out so long in contending against such a host of giants as have opposed us, we conclude the battle is not always to the strong, nor the race, to the swift, and so we shall give them "a little more grape" before we run. We shall—being pretty hard pressed, however, be much obliged for all the help we can get. We have been expecting our old friend "Chinquepin Ridge" to come to our assistance, but he stands off and calmly looks on as though he did not care a straw if we do get licked.

We do not suppose our friend W. T. C. intended or desired his communication to be published, but it suits us at this time as a text, and "take the responsibility:"

LAURENS C. H., S. C., }
April 5th, 1858. }

MAJ. SEABORN—*Dear Sir*:—To make amends for keeping you out of your money for this year's subscription for your very welcome and valuable paper, please find enclosed two dollars for this and the next year. I perceive you are handing around some of your defaulting subscribers—that is right; any man that would subscribe for a paper, and such a paper as yours is, and at the price you offer it at, and is mean enough to refuse to pay for it, ought to be rode on a sharp edged rail. I am sorry to learn you still fear you will have to give it up. You may

consider me a life subscriber as long as you conduct it, but I will not promise further.

With my best wishes for your success in any vocation you may engage in, I remain yours,

W. T. C.

P. S. I wish you to continue to fight against weeds, and fight valiantly, and if at any time I see that my feeble pen can do you any service, I will willingly assist you, though you are host within yourself.

Excuse imperfections in grammar and punctuation, as I write but seldom. W. T. C.

For the Farmer and Planter.
Oat Grass.

MR. EDITOR:—I send you a specimen of oat grass, which I consider the best adapted to our climate of any grass that I know of, as it will stand the longest drought as well as the severest cold. I have had it growing for years in my garden, and supposed, as most others, that it was the only place that it would grow. Being pleased with it, I concluded last spring to give it a trial, had about one-fourth of an acre set with it, and it is now over two feet high. I have been feeding my milk cows with it since the first day of this month. The quantity of milk has been increased very much. Being ahead of all other vegetation, it therefore comes in at a very suitable time. It may be cut several times during the season, after which it will put out and make seed. You may have the same grass growing, and know all about it, if not, the specimen I send you is about an average of the lot. And the object I have in sending it, is, that you may bear witness with me that grass can be raised in South Carolina, and with but little trouble, and on any of our common lands, as the lot on which this grew is far from being rich. There is no humbug about this grass. Who ever may try it, will be pleased with it. Should you not have it growing, and wish farther information in relation to it, I will most cheerfully give it; and any of the readers of the Farmer and Planter wishing to give it a trial, and will so inform me, I will send them a sufficiency of seed in August, so to do, free of any charge.

Very respectfully yours, L. A. OSBORN.
Anderson C. H., S. C., April 13th, 1858.

REMARKS.—Through the polite attention of the Engineer on the Blue Ridge Road, Mr. Bass, we received the specimen of grass from our friend OSBORN, for which he will accept our thanks. It was a most luxuriant branch of grass, upwards of two and a half feet high, of a deep green color, and just in the boot. We

take it to be a species of the oat grass, probably the *Andes Grass*. The *Holms arenaceus* of some writers, and *Avena Elatior* of others. If we are not mistaken, the same species of grass has been grown on borders in some of the gardens of our village for many years.—We introduced and cultivated it in Cass County, Ga., a few years since, where it created quite an excitement at first, but whether its culture has been continued there, we are unable to say. On good ground, well prepared, sown broadcast, it produces a heavy crop of hay that is relished by all stock that we have fed it to, especially when cut about the time the head is in the boot. If left till the seed matures, the straw becomes too hard for good hay. We have never fed it green, but doubt not it would be valuable as a soiling crop. The following favorable accounts from intelligent and practical farmers of the grass, we extract from the "FARMER'S AND PLANTER'S ENCYCLOPEDIA:"

—“From Colman's Fourth Report of the Agriculture of Massachusetts the following passage is extracted.

“The tall meadow oat (*Avena elatior*) has been cultivated in the county. This grass is not familiar to our farmers, but the success which has attended its cultivation encourages its extension. A Virginia farmer of the highest authority speaks of it, after fifteen years' experience, as a hardy plant, bearing drought and frost, heat and cold, better than any other grass known to him. A Pennsylvania farmer pronounces it of all other grasses the earliest, latest, and best for green fodder or hay. It blossoms about the middle of June, and is preferred to all others by horned cattle. It must be cut seasonably or it becomes hard like straw. A Middlesex farmer, who has cultivated it several years, and whose authority is of the highest character, confirms the above statements of its excellence both for grazing and hay. He says, from its earliest flowering it is adapted to be sown with red clover, and is fit to be cut about the first of June. His own account is as follows:

“In the spring he sowed with barley a field of four acres, and put on $2\frac{1}{2}$ bushels of oat grass seed, 5 lbs. of red clover, and 2 lbs. of white clover seed, to the acre. The soil was thin, and had been exhausted by long cropping. On the 3d of June in the following year it was cut, and gave two tons to the acre of the finest and best hay, either for cattle or horses, he ever had in his barn.”

“He thinks three bushels of seed should be sown to the acre. It is well adapted for grazing on poor and exhausted lands, as well as on those of a richer quality. It is a fortnight earlier than the common grasses, and throughout the driest weather exhibits a green appearance. From three-fourths of an acre, in good condition, he obtained over 20 bushels of well-cleaned seed.

“The late John Lowell, a man behind no other in his intelligent, successful, and disinterested efforts to advance the cause of an improved agriculture in Massachusetts and New England generally, says that, ‘under his cultivation, it has proved a most valuable grass, and fully sus-

tained its high character. It is a very early and tall grass, yielding a good burden. It will start rapidly after cutting. It is a perennial and enduring grass, and on his first experiment it lasted seven years without the necessity of renewal.’

“A farmer in Waltham objects to sowing the tall meadow oats and the herdsgrass (Timothy) together, as they do not ripen at the same time. The tall meadow oats, when I visited him, would be ready for the scythe in ten days, or about the middle of June, while the herdsgrass, at the same time, had not begun to show its head.

“This grass—*Avena elatior*, tall oat grass—sends forth flower-straws during the whole season; the latter math contains nearly an equal number with the flowering crop. It is subject to the rust, but the disease does not make its appearance till after the period of flowering.—It affects the whole plant, and at the time the seed is ripe the leaves and straws are withered and dry. This accounts for the superior value of the latter math over the seed crop, and points out the propriety of taking the crop when the grass is in flower. The nutritive matter afforded by this grass, when made into hay, according to the table is very small.”

GEORGE SINCLAIR.

For the Farmer and Planter.

Hog Spaying, &c.

MR. EDITOR:—To acquire the art of spaying properly and successfully, is of great importance to every farmer. And having learned this morning, from one of the most experienced hands in the whole country, the mystery of this art, I will, with your permission, give it to your numerous readers.

He says, “Take your almanac (Miller's) and notice the twelve signs, commonly called the Anatomy of Man's Body. And to know where the sign is, first find the day of the month, and against it, in the 7th column, stands the sign the moon is in; then finding the sign here, it shows the part of the body it is supposed to govern.” When the sign is in the Capricornus, Aquarius or Pisees, there is no danger whatever, attending the operation; and the operation might be successful even down to Leo, but there is great danger after Pisees. And he says—After Leo down to Capricornus, it is certain death to the animal.* He prefers spaying in the months of April and September; these months being so pleasant, renders it more favorable to the animal. He says, after experimenting with these signs for lo these fifteen

*Surely a mistake, for we have heard of many hogs being spayed when the sign was in the heart, (*Leo*) and even down to the knees, (*Capricornus*) without producing death.—Ed. F. & P.

years, he has become perfectly satisfied that he who observes the above signs, will never regret it.

Since I have been able to read understandingly, I have looked upon signs as the distinguished astronomer of Germany, Dr. Olbers did, upon seed sown in the moon, after forty years' experimenting, as "all moonshine." Thereupon I had lost all faith in almanac predication; but the remarkable success which attends this experienced operator, has brought back a wavering faith in the truthfulness of these signs. I would advise all farmers to try his *modus operandi*. Very respectfully yours, &c.,

Plowstock.

Murray's Ferry, S. C., April 8th, 1858.

From the Dollar Newspaper.

The Hive and Honey-Bee.

Answer to "P. J. B.," of Blairsville, and "Dutchman," of Berks County.

The inquiries made by your correspondents should have been answered long since; as it has not been done, I will attempt it. "P. J. B." requests bee-hive inventors to make known through the columns of the "Newspaper," the advantages claimed for their several inventions. I sincerely trust the parties referred to will let your readers hear from them. What I have to say will be in behalf of the Langstroth Moveable Comb Hive, briefly as follows: Its name, Moveable Comb Hive, indicates that each and every comb can be taken out and returned at pleasure. Every apiarian will at once perceive that when this can be done, he has as much control of the interior of the hive as he has of his vest pocket. If there is anything wrong it can be made right. Artificial swarms can be made at pleasure. Swarming can be prevented by several methods, none of which will occupy five minutes. Perfect protection against the extremes of either heat or cold. The greatest possible protection against the ravages of the moth or miller. In this connection it is well to say, there is an utter impossibility of the worms injuring the Moveable Comb Hive, if the owner will bestow a few minutes of attention on it. It is perfectly adapted, in one minute, to swarms of any size, from a quart to a half bushel. The very latest and smallest swarms can be made in Mr. L.'s hive, and by his system of management into stocks of first quality. All the best honey can be taken away and an inferior article supplied in its stead.—Empty combs can be given to the bees to fill again or to breed in. As it takes at least twenty pounds of honey to make one pound of wax, the bee keeper will at once perceive that by supplying empty combs he saves that amount of honey, as also the time occupied by the bees in manufacturing it. I will here remark, there is a process of making artificial comb, (for which a patent has been applied) which, in my opinion, will be a matter of great importance;

but to continue. Surplus honey can be taken with the utmost ease in the most beautiful and sealable forms, in larger quantities than is customary. The bees can be fed, if necessary, in either hot or cold weather. Queenless stocks can be supplied with queens when required.—I have discovered, by close and careful experiments, that the drones (males) averaging all classes of hives, consume nearly if not quite half of the honey gathered by the working bees during the period of their (the drones) existence. As a few of them answer all purposes we can determine to within a dozen how many there shall be in a hive. The operation of making queens, stowing away honey and pollen and comb building can be minutely observed. Bees can be kept in parlors, bed-chambers, &c., without any annoyance whatever, &c., &c. I have not, nor will I enumerate all the advantages possessed by this extraordinary invention, knowing your partiality for condensed articles.

I will now at the "Dutchman" I will admit that enough has been written in your columns upon the subject he refers to. I would have brought this to a close without referring to his article, but as I have, or think I have, something new to communicate to the world, I will continue. His assertion in regard to "errors" is exceedingly amusing. For instance, the stinging, or working bee, being the female. I will make your correspondent this offer: If he or any other person desires to witness the whole operation of making queens, and after being made deposit their eggs, he or they shall visit my apiary, say in June or July. If they are not satisfied of the facts as narrated, I will pay their passage coming from and returning to their homes; and further, I will show to the naked eye the actual commerce between the sexes, a matter, it is presumed, which has been by man witnessed but twice since the creation. Astonishing as this may seem to apiarians, yet it is a fixed fact. It will be understood that the last assertion cannot be shown to be the fact every day, as I shall not have a sufficient number of young queens, nor will the weather always be propitious. The *modus operandi* will be communicated at the proper time for apiarians to test the truth or untruth of my assertions.

PHINEAS J. MAHAN.

No. 720 Chestnut street, Philadelphia.

POLL EVIL AND FISTULA.—*Eds. Northwestern Farmer*:—I herewith send you a receipt for curing the above complaint. It is truly said to be a certain cure; I have tried it to my satisfaction.

Take a half ounce gum camphor, half ounce sugar of lead, three ounces spirits turpentine, three ounces aqua ammonia, add three gills alcohol; mix all together; let it stand a day or two, when it will be fit for use.

Rub the part affected, and warm and dry it with a hot iron every morning till it disappears.

J. R. STANDLEY.

Platteville, Iowa, Nov., 1857.

Old hide-bound meadows or pastures are much improved by harrowing early in the spring.



Ladies' Department.

Young Woman's Part in Life.

There is something in a pleasant faced damsel which takes a young man's eye—whether he will or no. It may be magnetism. It may be the sympathy of that which is beautiful in men's natures for that which is lovely in women's. The women have great power over the sex called sterner. Particularly so, if they be young, pretty and marriageable. Young women! do you know that it is you who are to mold some man's life? Have you ever thought of the responsibility that attaches to you long before you are married? A word you may say to a young man whom you may never marry nor even see a second time, will possibly exert an influence over his life that you don't dream of! A smile does wonders in lighting up the dark corners of a man's soul—a word in the right place may electrify his whole being. A wrong influence will do more damage in a single instant than a life time may correct. *The fashionable extravagance* of a large majority of the young women, *in town and country*, frightens young men away from all intention of matrimony, leads them to look upon the whole sex with distrust, and drives them to scenes where they are not bound hand and foot by the unreasonable demands of wives who would spend faster than they could make. And the fact that this tendency shows signs of increase makes the case worse. The fever of fashionable dress, the ignorance of housewifery accomplishments, the lack of the peculiar home-virtues that are calculated to make a home lovely—infect the villages now-a-days as they do in the city.

When an earnest, energetic, hard working, sensible young fellow, who is in search of a wife, sees this, he fears and hesitates, refuses to marry at all perhaps, and so does only half the good he could in the world—simply because he has no notion of fulfilling the homely but very truthful adage which tells of placing a man's nose upon the grindstone. We commend the subject to the regards of our young women readers. Let them cultivate the domestic virtues—make themselves true women—know a woman's duties—cherish their hands less and their intellect more—and their lot will be happier and better. More than this, they will find that there *are* mates in the world for them, and those worth having. Will not mothers bring the true mode of life before their daughters in the light in which it ought to be shown—which is nothing more than that of *common-sense*.—

That is the rarest of virtues; more valuable because there is comparatively little of it to be found.—*German town Telegraph*.

CREAM CHEESE.—The following recipe for making cream cheese has been found successful: Take a quart of cream, or if not desired *very rich*, add one pint of new milk; warm it in hot water until it is about the heat of milk from the cow. Add a tablespoonful of rennet, let it stand till thick, then break it slightly with a spoon, and place it in a frame eight inches square and four inches deep, in which previously put a fine canvas cloth; press it slightly with a weight, let it stand twelve hours, then put a finer cloth in a frame—a little powdered salt should be put over the cloth. It will be fit for use in a day or two.—*Exchange*.

FOR WASHING.—Cut into small pieces a pound of bar soap; put it into a tin pan or iron pot, with one quart water. Keep it hot, but not boiling, till the soap is dissolved, and stir in two large spoonfuls of powdered borax. When cool, it will again harden, and you will have double the quantity of soap, and better for washing all kinds of clothes. The labor of rubbing is very much diminished. Four spoonfuls of borax added to each gallon of soft soap, when first made, will greatly improve the soap for washing, and also prevent its eating the hands, as new soap is apt to do.—*Prairie Farmer*.

TO MAKE COFFEE.—There are various receipts for preparing and refining coffee. The following is the best that has ever come under our view, and is available in all places.

Procure your coffee fresh roasted, and not too brown, in the proportion of a quarter of a pound for three persons. Let it be Mocha and grind just before using; put it into a basin, and break into it an egg, yolk, white, shell and all; mix it up with a spoon to the consistence of mortar; place it with warm—not boiling—water in the coffee-pot; let it boil up and *break* three times, then stand a few minutes, and it will be as clear as amber, and the egg will give it a rich taste.

FOR A COUGH.—An excellent remedy for a cough caused by a common cold, is as follows: Take $\frac{1}{2}$ pint of sharp vinegar, place in it an egg without being broken, allow it to remain forty-eight hours, when it will be found that the shell has been completely dissolved by the acid; then break up the egg in the vinegar, add half a pint of honey, which being well mixed, will be ready for use. Take a spoonful for a dose several times a day. It is said that it never has failed to produce relief.—*Ex*.

TO CLEAN FLOORS AND ERASE GREASE SPOTS.—To a pailful of hot soap suds, take three table-spoonfuls of spirits of turpentine, and you will have a clean floor.

Rancid butter may be rendered sweet by churning it in new milk. It will remain sweet, however, but a few days.